

MONTEGRICO, JHORDIN JAMES C., Ph.D. The Experiences of Internationally Educated Nurses while Preparing for the NCLEX-RN. (2021)
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About 5.6% of the U.S. nursing workforce is composed of internationally educated nurses (IEN). Nurses from the Philippines comprise the majority of IEN applying for the National Council Licensure Examination – Registered Nurses (NCLEX-RN) but more than half of them fail the NCLEX-RN the first time. There is paucity of research on IEN and the NCLEX-RN, in general, and there are no published studies on IEN experiences while preparing for the NCLEX-RN.

This research described the experiences of IEN while preparing for the NCLEX-RN. It explored the facilitating and hindering factors of IEN NCLEX-RN preparatory experiences. Strategies were identified to overcome obstacles to IEN NCLEX-RN preparation.

The qualitative descriptive study research design was used in this study. Purposive sampling, online recruitment, and virtual interviews were done to collect data from 20 IEN from the Philippines working in the U.S. and internationally. Qualitative content analysis following Creswell and Creswell's five-step recommendation was used for data analysis. The Nursing Universal Retention and Success (NURS) model was used as the theoretical framework.

IEN had both positive and negative experiences while preparing for the NCLEX-RN. IEN who passed the NCLEX-RN the first time had different experiences compared to those who failed the NCLEX-RN the first time. Facilitating and hindering factors of IEN NCLEX-RN preparatory experiences were organized in six themes: (1) Being

Filipino, (2) Being Positive/Being Overwhelmed, (3) Learning Effectively/Ineffective Learning, (4) Training as a Global Nurse, (5) Regulating Nursing Practice, and (6) Living in a Better World. Four themes described the strategies to overcome the hindering factors: (1) Resource Management, (2) Management of Learning, (3) Psychological Preparation, and (4) Self-improvement.

Various individual, cultural, academic, environmental, and global factors influenced IEN NCLEX-RN preparatory experiences. IEN have unique contextual characteristics that shaped these experiences. The research findings provided preliminary data into understanding the NCLEX-RN preparatory experience from an IEN perspective, which have significant implications to individual IEN, international nursing education, and nursing practice. The findings, conclusions, and recommendations of this study provided direction for future research on IEN and the NCLEX-RN.

Keywords: NCLEX-RN, nursing education, Philippines, international nurse, foreign-educated nurse, nursing workforce

THE EXPERIENCES OF INTERNATIONALLY EDUCATED NURSES
WHILE PREPARING FOR THE NCLEX-RN

by

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*To my late parents, Adriano and Ofelia,
who taught me the value of education;*

*To my wife, Mary-Anne and
my kids, Karlo and Nicole,
for being my inspiration and
always believing that I can confidently go
in the direction of my dreams*

APPROVAL PAGE

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CHAPTER I

INTRODUCTION

Background

The cyclical nature of the nursing shortage in the United States (U.S.) that was first observed in the 1940s and persisted up to the present set the stage for international nurse recruitment and nurse migration to the U.S. (Cortes & Pan, 2014; Delucas, 2014; Eder, 2016; Jurado & Pacquiao, 2014; Masselink & Jones, 2014; Ortiga, 2014). The U.S. Migration Policy Institute reported that the nursing shortage would worsen in the next decade, with an estimated need of 1.2 million nurses (Altorjai & Batalova, 2017). With a 28% growth rate in the nursing profession, the U.S. Department of Health and Human Services (DHHS) projected that 795,000 nurses will be needed by 2030 (HRSA, 2017). The nursing shortage will further cause reliance on international nurse migration through recruitment of internationally educated nurses (IEN) as a strategy to help abate the nursing shortage in the U.S. (Altorjai & Batalova, 2017; Cortes & Pan, 2014; Delucas, 2014; Geun, Redman, & McCullagh, 2018).

According to the 2017 National Nursing Workforce Survey, there are 4.6 million registered nurses (RN) in the U.S., and 6% or 261,275 of these are IEN (Smiley et al., 2018). Philippine-educated nurses (PEN) are the largest group of IEN in the U.S., comprising more than half of all IEN (Geun et al., 2018; Jurado & Pacquiao, 2014; Spetz, Gates, & Jones, 2014; Squires, Ojemeni, & Jones, 2016). To practice nursing in the U.S.,

all IEN and U.S.-educated nurses (USEN) must pass the National Council Licensure Examination for Registered Nurses (NCLEX-RN). From 2003 to 2017, PEN represented 56.5% (n = 138,254) of all international NCLEX-RN applications (n = 245,669) while 186 countries shared the remaining 43.5% (Montegrigo, 2020). In 2018 and 2019, 59.2% (n = 22,390) of all IEN (n = 37,836) who applied for NCLEX-RN were from the Philippines (NCSBN, 2019). This large proportion of PEN reflects their choice of the U.S. as their top destination to practice nursing internationally (Marcus, Quimson, & Short, 2014). It is also reflective of the role of immigration policies as a driving force that significantly affects the trend in enrollment in nursing schools in the Philippines (Masselink & Lee, 2010; Ortega, 2014).

In general, IEN have lower NCLEX-RN first-time pass rates (FTPR) than USEN (Bahari, 2015; Jurado & Pacquiao, 2015; Montegrigo, 2020; NCSBN, 2019; Squires, 2017; Squires et al., 2016). From 2003 to 2018, the NCLEX-RN FTPR of IEN has declined from 52% to 44.7% compared to the FTPR of USEN, which has increased from 83% to 88.3% (NCSBN, 2019). In 2019, the NCLEX-RN FTPR of all IEN is 45.5% compared to USEN FTPR of 88.2% (NCSBN, 2019). IEN have different educational backgrounds and experiences that may account for the decreasing trend and wide variation in NCLEX-RN FTPR (Aiken, 2007; Bohnen & Balantac, 1994; Montegrigo, 2020). Identifying previous IEN experiences with the NCLEX-RN may help in developing individual strategies to potentially influence NCLEX-RN success.

Among all IEN, the FTPR of PEN was generally lower compared to all other IEN's FTPR. The 15-year (2003 to 2017) NCLEX-RN FTPR of PEN was 42% compared

to all other IEN's FTPR of 48.8% (Montegricon, 2020). In 2018 and 2019, the NCLEX-RN results showed that the PEN FTPR was higher (47.5%) compared to the FTPR of all other IEN (45.1%) (NCSBN, 2019). Despite this small improvement in scores, more than half (52.5%; n = 11,754) of all PEN who applied for the NCLEX-RN failed in 2018 and 2019 (NCSBN, 2019). As the U.S. has relied heavily on PEN to help decrease the effects of the nursing shortage, the large number of NCLEX-RN applications from the PEN can be a potential pipeline for the U.S. nursing workforce. However, when more than half of the PEN fail the NCLEX-RN for the first time, this reduces the number of nurses that would have been eligible for employment-based immigration, a national hiring strategy that has historically helped the U.S. during its cycles of nursing shortage.

Problem Statement

The low NCLEX-RN performance of PEN is an understudied area that warrants further investigation. There is a need to identify factors that are associated with the NCLEX-RN performance within this population. Among the various source countries of IEN for the U.S. nursing workforce, there is a need to focus on the Philippine nursing population for several reasons. First, PEN comprise more than half of the IEN in the U.S. (Guen et al., 2018; Jurado & Pacquiao, 2014; Spetz et al., 2014; Squires et al., 2016). Second, the Philippines has consistently been the top country among international NCLEX-RN applications for several decades (NCSBN, 2019). In 2018 and 2019, PEN accounted for 59.2% of all IEN first-time test-takers (NCSBN, 2020). Third, despite the large number of PEN taking the NCLEX-RN, the PEN FTPR has been historically low. Out of the 138,254 PEN who took the NCLEX-RN from 2003 to 2017, only 63,253

passed while 75,001 failed (Montegricon, 2020). In 2018 and 2019, 11,754 out of 22,390 first-time takers from the Philippines failed the NCLEX-RN (NCSBN, 2020).

The low NCLEX-RN performance of IEN in general, and the PEN in particular, is an area of concern that needs to be studied. The NCLEX-RN is a multifactorial exam (Brodersen & Mills, 2014) and IEN have unique contextual characteristics that may account for variations in NCLEX-RN outcomes (Aiken, 2007; Bohnen & Balantac, 1994; Bahari, 2015; Choe & Yang, 2009; Covell, Primeau, Kilpatrick, & St-Pierre, 2017; Ho, 2015; Salfi & Carbol, 2017; Squires, 2017). Given the state of understanding of factors associated with the NCLEX-RN performance PEN, this qualitative descriptive study was conducted. The study described the experiences of PEN while preparing for the NCLEX-RN as an attempt to discover and explore the factors relevant to NCLEX-RN outcomes for IEN.

The U.S. Nursing Shortage and IEN

The World Health Organization (WHO) and the International Council of Nurses (ICN) acknowledge the presence of a global nursing shortage (ICN, 2019; WHO, 2018). The increased demand for nurses in developed countries attracted IEN to migrate to various corners of the world. Globalization, immigration policies, economics, and international migration made it easier for nurses to practice nursing worldwide (Carnevale, Smith, & Gulish, 2015; Choe & Yang, 2009; Cortes & Pan, 2014; Li, Nie, & Li, 2014).

The U.S. has the world's largest nursing workforce – a fifth of the world's nurses – thus playing a pivotal role in international nurse migration (Aiken, 2007). It is a major

destination of IEN, as evidenced by the tremendous growth of IEN in the U.S. nursing workforce in the last decade (Masselink & Jones, 2014). The cyclical nursing shortage in the U.S. had become a significant stimulus for international nurse migration as the U.S. heavily relied on IEN to augment its nursing workforce (Li et al., 2014; Marcus et al., 2014; Ortega, 2014).

Historically, the influx of IEN into the U.S. can be traced to the cycles of nursing shortage in the country. The U.S. government started to allow the entry of IEN into the U.S. after World War II. The migration of nurses to the U.S. began in 1948 with the enactment of Public Law (P.L.) 402 or the Information and Educational Exchange Act, which created the Exchange Visa Program. Under this Act, IEN from European countries and the Philippines started migrating to the U.S., with nurses from the Philippines comprising 80% of these nurses (Choy, 2003). P.L. 402 then became the Mutual Educational and Cultural Exchange Act of 1961, which facilitated the entry of more IEN to the U.S. (Jurado & Pacquiao, 2014). The Immigration and Nationality Act of 1965 further paved the way for IEN from Southern Europe, Asia, and the Caribbean to work and migrate to the U.S.

For decades, the U.S. nursing shortage provided a platform for the U.S. Congress to promulgate, amend, and reauthorize legislation related to immigration to expedite the admittance of IEN into the country. The recent Emergency Nursing Relief Act of 2017 allows for 8,000 visas annually for health care workers, including nurses, to help ease the nursing shortage. At present, the COVID-19 pandemic called for the passing of Healthcare Workforce Resilience Act of 2020 (S. 3599) that proposed to offer 25,000

visas to IEN to help the U.S. during this medical emergency (CGFNS, 2020). Moreover, after more than a decade of visa retrogression, the U.S. National Visa Center (NVC) has caught up with the backlog of unprocessed visas. From July 2019 up to November 2020, the NVC declared employment-based visa processing for IEN as "current." (U.S. Bureau of Consular Affairs, 2020).

The latest U.S. National Nursing Workforce Survey reflects an increase in the proportion of IEN from 5.6% in 2015 (Sherwood & Shaffer, 2014; Spetz et al., 2014) to 6% in 2017 (Smiley et al., 2018). Most IEN migrating to the U.S. come from Asian countries such as the Philippines and India, which together account for 69% of IEN in the U.S. These two countries specifically designed nursing training programs to train their nurses for the global market (Eder, 2016; Masselink & Jones, 2014; Ortiga, 2014; Shaffer, Bakhshi, & Jacobs, 2018; Squires et al., 2016). The Philippines is the world's largest supplier of migrant nurses to 80 countries (Li et al., 2014; Marcus et al., 2014; Ortiga, 2014) and the U.S. is the most preferred destination of nurses from the Philippines (Marcus et al., 2014; Ortiga, 2014), thus explaining the vast proportion of Philippine IEN in the U.S. nursing workforce.

As the world's top producer of migrant nurses, nursing programs in the Philippines have a unique context that were designed to meet the needs of the global nursing market (CHED, 2016; Eder, 2016; Masselink & Lee, 2010; Ortiga, 2014). There is a well-orchestrated system among the Philippine government, public and private nursing schools, profit-based international employment agencies, nursing review centers, and international hospital employers to produce globally competitive nurses for the

global labor market (CHED, 2016; Eder, 2016; Masselink & Lee, 2010; Ortega, 2014). The thrust of the Philippines' Commission on Higher Education (CHED) is to promote quality and relevant higher education. It mandates Philippine schools to design educational programs that are responsive to the needs of both national and global labor markets (CHED, 2016; Eder, 2016; Masselink & Lee, 2010).

The Philippine nursing law mandates that graduates of Bachelor of Science in Nursing programs must pass the Philippine Nurse Licensure Examination (PNLE) as a requirement to practice nursing. Like the NCLEX-RN, the PNLE FTPR is used as an indicator to measure the quality of nursing programs in the Philippines. The Philippine Board of Nursing (BON) expressed concerns about the deterioration of the quality of nursing education in the country based on studies on NLE results from 2006 to 2014 (Bautista, Ducanes, & David, 2018; Rosales, Arugay, Divinagracia, & Castro-Palaganas, 2014). The PNLE FTPR from 2014 to 2018 is 75% (Montegrigo, 2019). The differences in the educational preparation and the test blueprint of the PNLE may account for the variations in foundational nursing knowledge of PEN as they prepare for the NCLEX-RN.

As a requirement to practice nursing in the U.S., IEN must pass the NCLEX-RN (NCSBN, 2019). The National Council of State Boards of Nursing (NCSBN), composed of the boards of nursing from the 50 states and territories, administers and monitors the NCLEX-RN performance of USEN and IEN who intend to practice nursing in the U.S. The NCLEX-RN is a computer adaptive test that measures an entry-level nurse's competency to provide safe patient care. It is based on a practice analysis of the current

nursing practice in the U.S., which becomes the basis for updating the NCLEX-RN test plan every three years (NCSBN, 2019).

Nurses from 187 countries worldwide have applied for the NCLEX-RN, which reflects the global interest of IEN to practice nursing in the U.S. (NCSBN, 2019). From 2003 to 2017, nurses from Asian countries like the Philippines, India, and South Korea accounted for 73.8% of all international NCLEX-RN applications (Montegricon, 2020). Compared to practicing USN, IEN who migrate to the U.S. are usually younger, have baccalaureate and graduate nursing degrees, and have more prior nursing work experience in their home countries before taking the NCLEX-RN (Carnevale et al., 2018; Jurado & Saria, 2018; Spetz et al., 2014).

The low performance of IEN in the NCLEX-RN (NCSBN, 2019) is an unexplored area of research. Despite the low NCLEX-RN performance among PEN, with more PEN failing than passing the NCLEX-RN (NCSBN, 2019), there is a dearth of literature on factors related to NCLEX-RN success, and there have been no empirical studies explicitly conducted on this research area. Individual studies that were specific to the NCLEX-RN performance of IEN, such as studies of IEN from Canada (McGillis Hall, Lalonde, & Kashin, 2016), Mexico (Squires, 2017), Saudi Arabia (Bahari, 2015), South Korea (Choe & Yang, 2009), and Taiwan (Ho, 2015), are very limited in number and scope. Therefore, studies to address this gap are needed.

Purpose Statement

This study explored the experiences of PEN who have taken the NCLEX-RN. Specifically, this qualitative descriptive study described the preparation experiences of

PEN for the NCLEX-RN to discover and explore the factors that are relevant in influencing the NCLEX-RN outcomes for IEN. It examined the facilitating and hindering factors that PEN experienced while preparing for the NCLEX-RN. Moreover, this qualitative study described the experiences of PEN who passed the NCLEX-RN and the experiences of those who failed the NCLEX-RN in first-time attempts to develop a deeper understanding of these experiences and to explore potential differences.

Significance

This qualitative study is one approach to develop a greater understanding of factors contributing to the low NCLEX-RN performance among Philippine nurses. Identifying these factors can help in designing individual or institutional interventions, strategies, or programs that will improve the IEN's NCLEX-RN FTPR. Thus, exploring the experiences of PEN during their preparation for the NCLEX-RN is significant to the individual IEN, Philippine nursing education, U.S. nursing workforce preparation, and nursing research.

Individual IEN

The results of this study are significant to the individual PEN by providing new information about possible facilitating and hindering factors contributing to the low performance of PEN on the NCLEX-RN. Once barriers to effective NCLEX-RN success are identified, individual PEN can use this information to consider possible strategies to overcome those barriers. Eliminating or minimizing those barriers has the potential to enhance the individual IEN's chances of passing the NCLEX-RN.

In addition to the negative financial impact, failing the NCLEX-RN poses a significant burden on the health and well-being of the individual nurse. Individuals who failed the NCLEX-RN reported experiencing stress, depression, disappointment, stigma, illness, and loss of income and opportunity (Kasprovich & VandeVusse, 2018; Mc Farquhar, 2014). Identifying activities to help IEN pass the NCLEX-RN can assist in preventing these adverse effects on the individual.

In the Philippines, the prospect of international migration and the promise of a better future are major motivating factors for Filipinos to study nursing (Castro-Palaganas et al., 2017; Masselink & Lee, 2010). The patriarchal nature of Filipino families makes it a cultural norm for parents to decide on a career and educational path for their children and often choose nursing as a degree, with the goal of international migration as a means of social mobility for the family. Failing the NCLEX-RN often represents a significant loss of opportunity for social mobility for the individual nurse and their family.

Philippine Nursing Education

In addition to the study's impact on individual IEN, this study is also significant to Philippine nursing education. Investigating the NCLEX-RN experiences of Philippine IEN can assist in identifying areas to strengthen the Philippine nursing curriculum. By identifying facilitating and hindering factors that affect NCLEX-RN performance, the results of this study can provide information that may be useful to nursing schools in the Philippines for designing programs or strategies that will enhance the facilitating factors and reduce or eliminate the hindering factors.

Strategies based on results of this study may potentially improve Philippine nursing education, PNLE pass rates, NCLEX-RN pass rates, and educational preparation of PEN for the global nursing market. While the NCLEX-RN FTPR is regarded as one of the significant indicators of nursing education quality in the U.S. (Banks, McCollough, Ketner & Darby, 2019; Duncan & Schulz, 2015; Taylor, Loftin, & Reyes, 2014;), it is also perceived as a reflection of the relative comparability of nursing education in other countries (Aiken, 2007). Overall, the results of this study can provide input to nursing education stakeholders in the Philippines to consider identified academic factors affecting NCLEX-RN performance of its nursing graduates to help more PEN pass the NCLEX-RN.

U.S. Nursing Practice and Workforce

The results of this study aim to assist PEN in increasing their probability of NCLEX-RN passing, which has implications for the U.S. workforce. With the anticipated worsening of the U.S. nursing shortage, an increased pipeline of IEN is needed to augment the workforce (Altorjai & Batalova, 2017; Cortes & Pan, 2014; Delucas, 2014; Geun et al., 2018). By increasing PEN NCLEX-RN success, the U.S. nursing workforce will be strengthened. Movement toward the 80% target of baccalaureate-prepared nurses, as recommended by the Institute of Medicine Committee on the Future of Nursing (Spetz et al., 2014) will be enhanced since most IEN and PEN have baccalaureate nursing degrees (Jurado & Saria, 2018; Smiley et al., 2018).

The only educational preparation for nurses in the Philippines is a bachelor's degree in nursing, which is considered comparable to U.S. nursing education based on

credentialing evaluation of the Commission of Graduates of Foreign Nursing Schools (CGFNS). The similarity of the bachelor's degree in nursing between the U.S. and the Philippines is one of the significant reasons for U.S. employers' preference for PEN when hiring IEN for U.S. nursing employment (Vestal & Kautz, 2009).

Nursing Research

This study sheds light on the experiences of PEN in preparing for the NCLEX-RN and what may strengthen or inhibit success. Exploring these experiences adds to the body of nursing knowledge about this underexplored phenomenon, thus contributing to knowledge development in the nursing profession. There is limited literature on studies about what influences IEN success or failure on NCLEX-RN. The limited conceptual base and empirical evidence on understanding factors influencing NCLEX-RN performance by IEN provide an opportunity to initiate a research program dedicated to understanding this phenomenon. This study can contribute to developing future research projects that could ultimately result in best practices in nursing education for this population. Future research on factors influencing NCLEX-RN outcomes on IEN has the potential for creating a broad conceptual and contextual base of the NCLEX-RN as it relates explicitly to IEN. A research program on this understudied area will generate empirical evidence in understanding the factors that account for the low NCLEX-RN performance of IEN.

Theoretical Framework

The Nursing Universal Retention and Success (NURS) Model

The NURS model was used as an orienting conceptual framework for this study. It is a framework used in sharing dialogue, disseminating research findings, and fostering collaborations in facilitating nursing student success (Jeffreys, 2015). Marianne R. Jeffreys proposed the NURS model as an organizing framework that has global applicability in understanding the multidimensional factors influencing nursing student success (Jeffreys, 2015). The original 2004 NURS acronym referred to Nursing Undergraduate Retention and Success, but it later expanded to include all levels of nursing students worldwide. The model specifically focused on student retention and then it was expanded to include the NCLEX-RN outcome (Jeffreys, 2015). Theory derivation was used to redefine the content and structure of the NURS model and transpose the focus from student retention to IEN NCLEX-RN success (Walker & Avant, 2011). Thus, in this study, *IEN* was used instead of *student*, and *IEN NCLEX-RN success* was used instead of *student success*.

Concepts of the NURS Model

The NURS model postulates that optimal outcomes, such as NCLEX-RN success, are dependent on the interaction of individual profile characteristics, affective factors, academic factors, environmental factors, academic outcomes, psychological outcomes, outside surrounding factors, and professional integration factors (Jeffreys, 2015). The interplay of these factors helps in explaining the multidimensionality of factors involved on NCLEX-RN outcomes. However, for this study, the NURS model was treated with

low theoretical sensitivity as categories and themes emerged from the participants' qualitative data.

Individual profile characteristics refer to individual demographic characteristics including age, race, ethnicity, gender, sexual identity, first language, prior educational and work experience, family background, and enrollment status (Jeffreys, 2015).

Affective factors are attitudes, values, beliefs about learning, ability to learn, cultural values and beliefs, self-efficacy, and motivation that are necessary for success (Jeffreys, 2015).

Academic factors include personal study skills, study hours, attendance, and schedule (Jeffreys, 2015).

Environmental factors are factors outside of the educational process that influence IEN success, such as financial status, family responsibilities, employment hours, support system, and living conditions (Jeffreys, 2015).

Outside surrounding factors are factors that are beyond the control of the individual such as local, national, or global events, political and economic issues, health care system, nursing issues, and job certainty (Jeffreys, 2015).

Professional integration factors refer to factors that enhance interaction with the social system of the academic environment for purposes of professional socialization and career advancement. Faculty advising, professional events, professional organizations, peer mentoring, and enrichment programs are

examples of these factors (Jeffreys, 2015). *Academic and psychological outcomes* refer to course grades and grade point average required for graduation and licensure, while satisfaction and stress are the two psychological outcomes defined in the model (Jeffreys, 2015).

Theory Applications

According to the NURS model, various factors influence student outcomes. In this study, *student outcomes* was conceptually referred as *IEN NCLEX-RN success*. While the NURS model recognizes the interrelationship of various factors in influencing IEN NCLEX-RN success, this qualitative descriptive study focused on identifying themes that described the experiences of IEN as they prepare for the NCLEX-RN. In general, qualitative descriptive studies have the least theoretical underpinning (Sandelowski, 2000). The researcher needs to have a low theoretical sensitivity to more openly consider emerging patterns and themes from the qualitative data. The researcher addressed this by using the NURS model as a potential orienting frame of reference for the data as they emerged from participant interviews, while not relying on it as the sole means of understanding the results and framing themes.

The NURS model was used as a framework in nine studies that were published from 2014 to 2019. These studies used the NURS model to explain factors affecting academic outcomes of nursing students in the U.S. and South Africa, and outcomes among graduate students in public health in Poland. Specifically, the model was used in guiding studies among U.S. nursing students regarding effects of intervention programs on student success (DellAntonio, 2017; Donnell, 2015; Fontaine, 2014; Schrum, 2015), and gender-based differences in nursing scholars' experiences and outcomes (Hoffart, McCoy, Lewallen, & Thorpe, 2019). Internationally, the NURS model guided studies on predictors of nursing performance in South Africa (Mthimunya & Daniels, 2017) and graduate admission processes in Poland (Panczyk et al., 2017). It was also used to guide

integrative reviews of 14 studies on U.S. nursing education (Graham, Phillips, Newman, & Atz, 2016) and 17 studies on international nursing students' academic performance (Mthimunya & Daniels, 2019). It has not been used in guiding research on NCLEX-RN for IEN.

Among these studies that used the NURS model as a framework, seven were quantitative studies that mostly used correlational research designs and two integrative or systematic reviews that analyzed 31 different studies. All nine NURS model-related studies used appropriate research designs and have adequate sample size ranging from 128 to 3,506. However, DellAntonio's (2017) conclusion on the influence of gender and ethnicity on retention and academic success should be taken with caution due to the underrepresentation of males and students of ethnic backgrounds in the sample.

Most of these studies determined the association of individual, academic, and institutional factors on academic outcomes. On studies that investigated the role of individual characteristics, only one of these studies used NCLEX-RN as an outcome and reported that gender is not associated with NCLEX-RN outcomes (Hoffart et al., 2019). Other studies reported that males are more likely to be off track in their studies (Donnell, 2015) and less successful in the nursing program (Mthimunya & Daniels, 2019). Being an older student is a predictor of academic success (Mthimunya & Daniels, 2019) but Fontaine (2014) argued that younger students had higher retention rates in the nursing program. Students of non-majority ethnic origins (Donnell, 2015; Graham et al., 2016; Mthimunya & Daniels, 2019), students with English as a second language (Donnell, 2015; Mthimunya & Daniels, 2019), and those who work part-time (Mthimunya &

Daniels, 2019) have negative associations with academic success in nursing. Academic factors such as pre-requisite GPA, specific courses, homework completion, lecture attendance, and prior education have positive associations with academic success in nursing (Mthimunye & Daniels, 2017, 2019). Institutional factors such as instructor immediacy, retention intervention programs, use of retention specialist, and reading comprehension programs are significantly associated with successful academic outcomes (DellAntonio, 2017; Donnell, 2015; Fontaine, 2014; Schrum, 2015).

Although the NURS model has been used in guiding research on nursing outcomes during the past five years, its use on NCLEX outcomes is very limited in number and scope. Hoffart et al.'s (2019) study is the only research that used the NURS model in determining relationship of NCLEX-RN but its focus on gender as the only variable in the study limits the scope of the use of the model in recent studies. There were several studies that used the model among international nursing students, but there is no study that has used the NURS model to guide research to understand IEN's performance in the NCLEX-RN. This will be one of the early studies on this research area.

Assumptions

This study is based on the following assumptions:

1. IEN, as individuals, have unique experiences as they interact with their environment.
2. The NCLEX-RN experience is a multifactorial phenomenon. IEN experiences when preparing for the NCLEX-RN are influenced by individual, academic, institutional, and environmental factors.

3. The IEN NCLEX-RN experiences are affected by various internal and external variables. IEN have different unique contextual backgrounds when they prepare and take the NCLEX-RN.
4. Differences in nursing education and nursing practice worldwide influence knowledge of nursing content and test-taking practices, which may influence the IENs' preparations for the NCLEX-RN.
5. Past academic and employment experiences contribute to an individual's cognitive framework that may affect an IEN's preparation for the NCLEX-RN.

CHAPTER II

REVIEW OF LITERATURE

This chapter synthesizes the existing literature on factors affecting NCLEX-RN experience. This section is organized as follows: (1) the nursing shortage as an impetus for IEN migration to the U.S., (2) nursing education in the Philippines, (3) the NCLEX-RN, and (4) factors affecting NCLEX-RN performance using the Nursing Universal Retention and Success (NURS) model as the theoretical framework.

The Nursing Shortage

The Global and U.S. Nursing Shortage

The global and U.S. nursing shortage set the stage for international nurse migration. The reliance on Philippine-educated nurses (PEN) to help countries provide solutions to their nursing shortage has become an international phenomenon (Eder, 2016). PEN are preferred over other IEN by employers in the U.S., Europe, and the Middle East because of their bachelor's education in an Americanized nursing curriculum, English proficiency, and familiarity with Western nursing techniques and standards (DOLE, 2015; Eder, 2016; Vestal & Kautz, 2009). The approach of marketing PEN to the global labor market is a result of a well-orchestrated collaboration between the government, nursing schools, and international hospitals (Eder, 2016; Masselink & Lee, 2010; Ortiga, 2014, 2018), which stems from the imperialist colonial ties between the Philippines and the U.S. (Brush, 2010).

Registered nurses comprise the largest health care profession in the U.S. and with a growth rate of 26% from 2010 to 2020, faster than the growth rate of all occupations (Cortes & Pan, 2014). According to the 2017 U.S. National Nursing Workforce Survey, there are 4.6 million registered nurses in the U.S. (Smiley et al., 2018). With IEN currently comprising 6% of the U.S. nursing workforce, there was an increase of 15,995 IEN in the U.S. from 2017 to 2019 (Sherwood & Shaffer, 2014; Smiley et al., 2019; Spetz et al., 2014).

The U.S. has a critical role in international nurse migration as evidenced by the tremendous growth of IEN in the U.S. nursing workforce in the last decade (Aiken, 2007; Cortes & Pan, 2014; Masselink & Jones, 2014) and by the representation of nurses from 187 countries who applied for the NCLEX-RN (NCSBN, 2019). The U.S. resorted to hiring nurses from developed countries such as Canada and the United Kingdom, and from developing countries in Asia such as the Philippines, India, and South Korea, to augment its nursing workforce (Jurado & Pacquiao, 2014; Shaffer et al., 2018). Since the 1960s, the Philippines has consistently produced the majority of IEN entering the U.S. The colonial history between the two countries, similarity in nursing educational system, proficiency in the English language, and the Philippine government's platform of encouraging international nurse migration made the Philippines the top supplier of IEN for the U.S. (Tyner, 2004 as cited in Masselink & Lee, 2010). From 2002 to 2020, the Philippines consistently led international applications for the NCLEX-RN (Montegrigo, 2020; NCSBN, 2020).

IEN in the U.S. Nursing Workforce

From 1980 to 2010, it was estimated that 70% of IEN come from the major top countries that include Canada, China, Cuba, England, Germany, Haiti, India, Ireland, Jamaica, Japan, Mexico, the Philippines, South Korea, Thailand, and Trinidad and Tobago (Cortes & Pan, 2014). More than 3% of the total U.S. nursing workforce migrated from the Philippines, which has well-structured nursing educational programs that aim to train and place its nurses for the global nursing market (Eder, 2016; Masselink & Jones, 2014; Ortiga, 2014; Shaffer et al., 2018; Smiley et al., 2018; Squires et al., 2016). Compared to USEN, IEN who migrate to the U.S. are usually younger, married, baccalaureate-prepared nurses, have a higher proportion of male nurses, and were practicing nursing before taking the NCLEX-RN (Carnevale et al., 2018; Jurado & Saria, 2018; Spetz et al., 2014). About 68% of IEN have a bachelor's degree, compared to the U.S.' 49.2%, and more than 90% of PEN have bachelor's degree or higher (Spetz et al., 2014). In general, there is a common consensus that the presence of IEN has resulted in significant contributions in the U.S. nursing workforce (Ma, Ghazal, Chou, Ea, & Squires, 2020; Xu, Zaikina-Montgomery, & Shen, 2010). The IEN are able to infuse human capital, diversity and varied experiences (Spetz et al., 2014), which are essential in creating a stronger, more stable, and educated nursing workforce (Ma et al., 2020; Shaffer et al., 2018).

Nursing Education in the Philippines

The Philippine Bachelor of Science in Nursing (BSN) Curriculum

In the Philippines, the Commission of Higher Education (CHED) is the government agency that prescribes standardized curricula, supervises the implementation of higher education curricula, and regulates higher education in the country (CHED, 2019; Eder, 2016). The CHED works closely with discipline-specific technical panels (TP), such as the Technical Panel on Nursing Education (TPNE). The TPNE is composed of specialists from various nursing organizations, such as the Professional Regulation Commission (PRC), Board of Nursing (BON), the Association of Deans of the Philippine Colleges of Nursing (ADPCN), and the Philippine Nurses Association (PNA) in designing, monitoring, and evaluating the nursing curriculum (Eder, 2016). The collaboration and outcome of the TPNE nursing curriculum development are based on the analysis of internal and external factors that influence Philippine nursing practice and on the thrusts and mandate of CHED. Nursing schools with exemplary performance are granted an “autonomous status,” which gives them academic freedom to design their curricula as long as they maintain the basic requirements prescribed by CHED (Eder, 2016).

The Philippine government seeks to provide education for its citizens and students to be globally competitive. As such, the government mandates that higher educational programs are offered at par with international standards (CHED, 2016.). Thus, global competitiveness and international standards are values that dominate curriculum development sessions nationwide (Eder, 2016). To achieve global competitiveness and

international standards, one of CHED's thrusts is "to promote relevant and quality higher education" by ensuring that "higher education institutions and programs are at par with international standards and graduates and professionals are highly competent and recognized in the international arena" (CHED, n.d. p.1). The CHED likewise ensures the development of curricular programs that are relevant and responsive to the needs of the nation, region, and the world (CHED, 2016). This thrust led to the recognition of Filipinos as the largest migrant workers in the world, with 10% of its population working overseas (Mangahas, 2015). In support of this thrust and with the Filipino culture of international migration, the standardized BSN curriculum is designed to reflect both local and global needs of various patient populations and potential employers. Nursing schools have programs, activities, and clinical laboratories that are designed to train its students for the global nursing labor market. While this approach is advantageous, it met criticisms from stakeholders in local industries arguing that higher education in the Philippines has focused too much on international needs and neglecting its domestic needs (Eder, 2016). This has contributed to "brain overflow" or the spilling over of skilled workers in the global labor market (Battistella & Sun Liao, 2014). In 2019, the Philippine Department of Labor and Employment reported that the Philippines is experiencing a nursing shortage as their nurses leave the country for international employment.

The BSN curriculum is the only educational pathway for nursing licensure and entry into nursing practice in the Philippines. The current BSN curriculum uses the Philippine National Nursing Core Competencies Standards of 2012 and aims to produce a

nurse generalist who can perform the three major roles of a professional nurse in client care, leadership and management, and research (CHED, 2017). In compliance with CHED's thrust on global competitiveness and international standardization, CHED Memorandum Order (CMO) 18, series of 2011, emphasizes that the policies and standards of nursing education programs should "attain global competitiveness and to keep abreast with global standards, fast-paced trends and changing needs of society" (CHED, 2011, p.1). Nursing is considered as one of the heaviest college majors in Philippine higher education (Ortiga, 2014). Part of the overloaded curriculum is the addition of courses aimed at training the students for the global labor market. Schools are teaching nursing students "how to practice first world nursing in a third world context" (Ortiga, 2014, p. 67).

The BSN curriculum is a four-year program that consists of 192 units or credit hours, which are divided into general education and other courses (50 credit hours), major science courses (17 credit hours), and professional nursing courses (125 credit hours). The professional nursing courses are threaded through the four years of the program with emphasis on nursing concepts with corresponding clinical hours, which are referred to as Related Learning Experience (RLE). Each semester provides 23 to 28 credit hours of general and professional courses, except for the last semester, which is an RLE-intensive 14-credit hour semester (CHED, 2017). The professional courses consist of 53 credit hours of RLE or equal to 2,703 total RLE clock hours. The BSN curriculum provides an intensive practicum that is designed to enhance the basic competencies of a nursing student in achieving the program outcomes as an entry-level nurse (CHED,

2017). The BSN curriculum is patterned after the U.S. nursing education system and uses the medical model across the five major nursing specialty areas, namely, medical, surgical, obstetrics, pediatrics, and psychiatry. Philippine nursing schools extensively use American-authored nursing textbooks, similar to textbooks that are used in U.S. nursing schools.

Comparatively, most BSN curricula in the U.S. consist of 120 to 125 credit hours of general education that are taught during the first two years (also known as junior or lower division) and professional nursing courses that are taught during the last two years (also known as senior or upper division) of the curriculum. Clinical practicums and didactic generally have fewer course credit hours (12-16 credit hours per semester), compared to the Philippine B.S.N. curriculum (minimum of 24 credit hours per semester) (CHED, 2017). Ortiga (2014) claimed that the standard Philippine BSN curriculum has 15 to 20 more courses than the BSN curriculum from the University of California at Berkeley.

Vestal and Kauntz (2009) reported that one of the reasons for U.S. employers' preference in hiring PEN is the similarity in the nursing curriculum between the two countries. However, in spite of the similarity in educational programs and the use of similar textbooks and despite the presence of more clinical hours in the Philippine BSN curriculum, there is a huge difference in NCLEX-RN outcomes (NCSBN, 2019). This difference in test outcome points to understanding other factors that might have influenced the NCLEX-RN performance of PEN.

Previous studies expressed concerns about the deterioration of the quality of nursing education in the Philippines. A study by the Philippine BON reported an alarming decreasing trend in the Philippine Nurse Licensure Examination (PNLE) overall pass rates from 2006 (49%) to 2010 (35%) (Rosales et al., 2014). A study by Bautista et al. (2018) showed that in spite of the increasing trend in the PNLE result from 2011 (41%) to 2016 (45%), the overall pass rate shows that more than half are still failing the examination. Furthermore, the FTPR of PNLE examinees from 2014 to 2018 showed that only 75% of first-time takers pass the PNLE (Montegrigo, 2019).

Enrollment Trends in Philippine Nursing Schools

From 190 nursing schools in 1995, the Philippines has 498 nursing schools at present. Enrollment trends in nursing schools are largely influenced by the presence of opportunities for international migration (Choy, 2003; Masselink & Lee, 2010; Ortiga, 2014), particularly U.S. migration (Arends-Kuenning, Calara, & Go, 2015) since the U.S. is the preferred destination of PEN (Marcus et al., 2014). For instance, the last major wave of IEN recruitment in the U.S. in the early 2000s resulted in the largest demand for nursing graduates, with 450,000 new nursing students entering Philippine nursing schools in 2005 (Ortiga, 2014). This can be attributed to the enactment of the Nursing Relief for Disadvantaged Areas Act of 1999, which reopened the doors for PEN to U.S. migration after the “freeze-hiring” of nurses in the mid-1990s due to the U.S. economic recession.

The Philippine Nurse Licensure Examination (PNLE)

Like the U.S., nursing graduates in the Philippines must pass the PNLE as a requirement to practice nursing. The PNLE is developed and administered by the

Philippine BON twice a year, in May or June and in November or December. It is a paper-and-pencil format test that consists of five parts, named Nursing Practice I to V, with 100 questions in each part.

There is an alarming concern about the deterioration of the quality of nursing education in the country based on studies of PNLE performance from 2006 to 2018 (Bautista et al, 2018; Montegrigo, 2019; Ordonez & Ordonez, 2009; Rosales et al., 2014). In one PNLE administration, there were 20 schools with zero passing rate (Cheng, 2008). Studies on Philippine licensure examination across disciplines further assert that the decreasing trend is a symptom of a deteriorating higher educational system (Masselink & Lee, 2014; Ordonez & Ordonez, 2009). Higher passing rates in PNLE are associated with school factors such as location, large sized higher education institutions (HEI), state HEI, year of establishment prior to 1970, accreditation, and lower student-faculty ratio (Bautista et al., 2018; Dator, 2016; Ortiga, 2014; Rosales et al., 2014). The commercialization of nursing education, proliferation of substandard nursing schools (Masselink & Lee, 2014), and the Commission on Higher Education's (CHED) loose regulation in implementing the mandated standards of education are systemic factors that might have contributed to this deterioration (Ordonez & Ordonez, 2009).

The Commission on Graduates of Foreign Nursing Schools (CGFNS)

Different countries have variations in nursing education, nursing practice, and licensure practices (Garfield & Berryman, 2012; Ko & Yu, 2019; Makata, Ilo, & Agbapuonwu, 2016; Nair & Rujan, 2017; Schipiour, 2016; Shaffer & To Dutka, 2012), which are factors to consider when IEN take the NCLEX-RN. CGFNS, International is

the U.S. agency tasked to evaluate IEN credentials in order to ensure comparability of education and competency when applying for U.S. nursing licensure.

Historically, the IEN must pass the CGFNS Certification Examination (CE) required by specific state boards of nursing before writing the NCLEX-RN. However, almost all states have eliminated the CE. In place of the CE, state boards of nursing now require a CGFNS Credentials Evaluation of IEN completion of a nursing degree before taking the NCLEX-RN (NCSBN, 2019). With the lack of global standards in nursing education (Baumann & Blythe, 2008; ICN, 2012; Xu, 2010), this process is necessary to ensure that IEN have similar competencies to ensure quality and safe nursing practice. IEN perceive the entire licensure process and CGFNS requirement as a significant barrier in preparing for the NCLEX-RN (McGillis Hall, Jones, Lalonde, Strudwick, & McDonald, 2015; Moyce, Lash, & Siantz, 2016; Schipiour, 2016).

IEN consider the entire NCLEX-RN experience, from application process to preparation for the licensure examination, burdensome and stressful (Covell et al., 2017). The application process is more costly and tedious compared to USEN applying for the exam due to the additional requirements set forth by individual state boards of nursing. IEN are required to submit evidence of completion of nursing education from their home country to the CGFNS for a credential evaluation to determine comparability with U.S. nursing education. They are required to pass an English proficiency examination, such as the Test of English of Foreign Language (TOEFL) or the International English Language Testing Service (IELTS) prior to issuance of an RN license (NCSBN, 2019). Additionally, Section 343 of the IIRIRA of 1996 requires IEN entering the U.S. to

complete the VisaScreen program, which requires both an RN license and passing an English proficiency exam, before they can receive either a permanent or temporary occupational visa (CGFNS, 2019).

Identifying the experiences of IEN in preparing for the NCLEX-RN may provide useful information to prospective applicants regarding requirements, processes, fees, and other relevant information that may be needed in the licensure application and credentialing process. Deeper understanding of such experiences through the findings in this research study may serve as a guide for other IEN in reducing anxiety and stress, which may potentially improve NCLEX-RN preparations and outcomes (Choe & Yang, 2009; Sears, Othman, & Mahoney, 2015).

The NCLEX-RN

The NCLEX-RN as a Computer Adaptive Test

The U.S. requires all nurses who want to practice nursing in the country to pass the NCLEX-RN, a computer-adaptive test that determines an applicant's ability to provide safe nursing practice (NCSBN, 2019). The NCSBN develops and administers the NCLEX-RN. The NCLEX-RN evaluates the minimum competency in problem-solving, critical thinking, and clinical judgment of an entry-level nurse. The test has an excellent psychometric property, with a reliability coefficient ranging from .87 to .92 (Foreman, 2018). The NCLEX-RN test blueprint uses client needs categories, such as Safe and Effective Care Environment, Health Promotion and Maintenance, Psychosocial Integrity, and Physiologic Integrity as the framework for developing the assessment (NCBSN, 2019; Quinn, Smolinski, & Peters, 2018).

The NCLEX-RN test plan is revised every three years after conducting a practice analysis survey among the practicing RNs nationwide in order to reflect actual nursing practice (NCSBN, 2019). As patient complexity has increased through the years, the NCLEX-RN has become more difficult because the threshold for basic competency has also increased, making the exam more difficult to pass (Quinn et al., 2018). The latest version of the NCLEX-RN test plan was updated in April 2019 and will be in effect until March 2023 (NCSBN, 2020). Typically, NCLEX-RN pass rates decrease when the test plan is updated (Quinn et al., 2018).

The NCLEX-RN exam remains the most commonly measured outcome of academic performance and effectiveness of nursing programs (Duncan & Schulz, 2015). While the NCLEX-RN FTPR of nursing graduates is an indicator of the quality of nursing programs in the U.S. (Banks et al., 2018; Giddens, 2009; Taylor et al., 2014), it is also a reflection of the relative comparability of nursing education in various countries (Aiken, 2007).

The process for obtaining U.S. nursing licensure is rigorous to ensure that IEN meet the same requirements and standards as USEN (Shen, Angosta, Sotero, Rice, & Raju, 2019; Squires et al., 2016). The NCLEX-RN ensures that IEN have comparable academic requirements and competencies, similar to USEN before practicing nursing in the U.S. (Aiken, 2007). IEN were trained and licensed differently, which provides context on the diverse and unique educational and cultural variations in nursing education and nursing practice that may affect NCLEX-RN outcomes (Bahari, 2015; Ho, 2016; Hou et al., 2019; Lurie, 2016; Squires, 2017). Even with advanced education, international

nursing students who are taking graduate nursing studies in the U.S. have difficulty in passing the NCLEX-RN, which is a requirement for clinical practicums in graduate nursing programs (Genovese, Schmidt, & Brown, 2015; Palmer, Zuraikat, West, Calderone, & Shanty, 2019).

The Early Years of NCLEX-RN

In 1977, all IEN were required to pass the NCLEX-RN, which was then called the State Board Test Pool Examination (SBTPE). This tested the IEN knowledge in the major clinical areas in nursing such as medical, surgical, maternity, pediatrics, and psychiatry (Choy, 2003). Prior to that year, not all states administered the SBTPE. For states that did not administer SBTPE, licensure by endorsement was the most common means of licensure prior to SBTPE (Jurado & Pacquiao, 2015). For states that administered the exam, majority of the IEN failed. For instance, in California, 80% to 90% of IEN failed the exam in 1970, while in New York, first-time IEN test-takers had a failure rate of 63.6% to 90.9% from 1972 to 1974. In 1976, 77% of IEN failed the SBTPE (Jurado & Pacquiao, 2014). This shows that historically, IEN have struggled to pass the licensure examination.

IEN who did not pass the examination faced deportation to their respective countries (Jurado & Pacquiao, 2014). These drastic measures of provisional license revocation and deportation and the exodus of IEN worsened the nursing shortage that the IEN were supposed to help resolve. Alarmed by the impending impact of the exodus of IEN on the nursing workforce, the American Nurses Association (ANA) and the Philippine Nurses Association (PNA) created an ad hoc committee to coordinate with the

International Labor Organization (ILO) and the World Health Organization (WHO) to develop alternative solutions. One of the recommendations was to develop a mechanism where IEN can be tested in their communication skills and professional nursing competency in their home country prior to emigrating to the U.S. Hence, the creation of CGFNS in 1977, through the joint sponsorship of ANA and the National League for Nursing (NLN). The CGFNS was tasked to administer a certification examination, which is a screening exam that tested IEN on the five nursing specialties and an English language competency. NLN developed the nursing portion of the exam while the Educational Testing Service (ETS) created the English competency portion of the certification exam. The first CGFNS examination was administered in 1978 in 32 countries worldwide, including Manila, Philippines (Choy, 2003; Nichols & Davis, 2009).

Major NCLEX-RN Developments

Several developments in the administration, content, and format of the NCLEX-RN have taken place over time. Changes in the NCLEX-RN can impact an individuals' likelihood of passing the NCLEX-RN (Quinn et al., 2018; Squires et al., 2016).

Paper and pencil to computer-adaptive testing. Since the establishment of NCSBN in 1982, NCLEX-RN transitioned from a paper-and-pencil test to computer adaptive testing in 1994 (Lockie, Van Lannen, & McGannon, 2013). IEN are used to paper-and-pencil testing in their home countries. A change in the method of test administration may be a factor in influencing NCLEX-RN outcomes.

Creation and abolishment of CGFNS certification examination (CE). The CGFNS was established to serve as a screening mechanism for IEN prior to taking the NCLEX-RN. The CGFNS CE was found to be predictive of NCLEX-RN passing (Davis & Nichols, 2002) and was a requirement prior to taking the NCLEX-RN (CGFNS, 2020; NCSBN, 2019). However, interest groups have lobbied against it since the CGFNS CE was perceived as an additional burden on IEN (Jurado & Pacquiao, 2014). State boards of nursing gradually eliminated the CGFNS CE (NCSBN, 2019). The CGFNS credentials evaluation, which determines comparability of IEN educational records with the U.S., replaced the CGFNS CE (CGFNS, 2020).

International testing. Before 2005, NCLEX-RN was only available in the U.S. The NCSBN approved the administration of NCLEX-RN internationally in 2002 but it was only in 2005 that the NCLEX-RN international testing centers were established in Asia and in Europe, specifically in Hong Kong, Seoul, South Korea, and London, England (Brush, 2008; Jurado & Pacquiao, 2014; Masselink & Jones, 2014). At that time, Manila, Philippines was not identified as an international NCLEX-RN testing center. However, after consideration that majority of IEN in the U.S and almost one-third of all international applications for the NCLEX-RN come from the Philippines, the NCSBN finally declared Manila as an NCLEX-RN international test center in 2007 (Jurado & Pacquiao, 2014; Masselink & Jones, 2014).

In 2015, Canada implemented the NCLEX-RN as the official licensure examination for its nurses, replacing the Canadian Registered Nurse Examination. The change in Canadian nursing licensure decreased their national FTPR from 85% to 69.7%

(McGillis Hall et al., 2016). Canadian nursing graduates mentioned issues on exam translation from English to French, test content, and practice differences between Canadian and U.S. nursing that accounted for the decrease in FTPR in the new test (McGillis Hall et al., 2016; Salfi & Carbol, 2017). For IEN who took the NCLEX-RN in Canada, previous employment experience, having a positive support system, and participation in a bridging program influenced a positive NCLEX-RN outcome (Covell et al., 2017). In March 2020, Australia adopted the NCLEX-RN for IEN as a pathway to nursing licensure (NCSBN, 2020). While the current NCLEX-RN is already a hurdle for IEN, the anticipated implementation of the Next Generation NCLEX-RN will likely become a more challenging exam, because it will change the test format to provide more realism into the assessment to simulate nursing practice in the U.S. (Caputi, 2019; Eastridge, 2019).

COVID-19 and the NCLEX-RN. The pandemic created significant changes in NCLEX-RN test administration for public health reasons. Since the beginning of the pandemic in March 2020, the NCSBN has made three changes on test administration. These changes involved reducing the number of questions, decreasing maximum testing time, and eliminating the Next Generation NCLEX-RN (NGN) research questions. The “normal” maximum NCLEX-RN test length is six hours and questions ranged from 75 to 260 questions. At the beginning of the pandemic in early to mid-2000, test-takers were only tested 60 to 130 questions for a maximum of four-hour testing time. Additionally, social distancing in testing centers reduced testing room capacity, which resulted in cancellation of test schedules. The current version of the NCLEX-RN test administration,

with 75 to 145 questions, maximum of five-hour of testing time, and inclusion on NGN questions, was in effect last October 1, 2020 (NCSBN, 2020).

IEN Studies on NCLEX-RN

A literature search of studies on IEN from 2014 to 2019 on various databases such as Cumulated Index to Nursing and Allied Health Literature (CINAHL), PubMed, Medline, Scopus, Education Resources Information Center (ERIC), Dissertation and Theses Global, and Google Scholar was done using the keywords *NCLEX-RN*, *internationally educated nurses*, *international nurses*, *foreign-educated nurses*, and *foreign nurses*. The lack of published studies on NCLEX-RN for IEN from 2014 to 2019 warranted inclusion of earlier relevant foundational studies and inclusion of studies on USEN. Previous NCLEX-RN studies about IEN from Canada, China, Korea, Mexico, the Philippines, Saudi Arabia, Taiwan, and the U.K reflected low and wide variability in FTPR and identified several individual, academic, institutional, and environmental factors that affect NCLEX-RN outcomes (Aiken, 2007; Aiken & Cheung, 2008; Bahari, 2015; Benton, 2017; Choe & Yang, 2009; Covell et al., 2017; McGillis Hall et al., 2016; Ho, 2015; Salfi & Carbol, 2017; Squires, 2017).

Trends in NCLEX-RN Applications and Pass Rates

Fluctuations in IEN NCLEX-RN applications were observed from 2003 to 2017 (NCSBN, 2019). There was an increase in IEN NCLEX-RN applications from 2003 to 2007 and a steady decrease from 2007 to 2014. Applications from 2014 to 2017 slightly increased but were still below the 2003 figures. Applications from PEN comprised almost 60% of all international NCLEX-RN applications (Montegriconi, 2020).

Socio-economic and political factors accounted for the fluctuations in IEN NCLEX-RN applications. The economic recession in the mid-2000s increased the enrollment in U.S. nursing schools as displaced workers shifted careers to healthcare (Snaveley, 2016). To meet their financial needs, the recession made nurses who were out of work or who worked part-time go for full-time jobs, which produced 250,000 full-time equivalent (FTE) positions that is considered the largest increase in nursing employment in 40 years (Staiger, Aurbach, & Buerhaus, 2012). The economic crisis in the U.S. reduced the demand for IEN that was reflected in the number of IEN NCLEX-RN applications. Through the years, the fluctuation in IEN NCLEX-RN applications is also a result of legislation on immigration that affected nurses. For instance, the passing of the Nurse Relief Act of 1989 significantly increased the number of IEN NCLEX-RN applications (Cortes & Pan, 2014). With the expiration of these laws, employment visas are limited for IEN, which eventually reduced their interest in taking the NCLEX-RN.

Generally, IEN have lower NCLEX-RN FTPR than USEN and PEN have lower pass rates compared to the general IEN and USEN population (Bahari, 2015; Jurado & Pacquiao, 2015; Montegrino, 2020; NCSBN, 2019; Squires, 2017; Squires et al., 2016). IEN have diverse and unique educational, contextual, cultural, and linguistic needs and challenges that can account for different learning perspectives and nursing knowledge (Bohnen & Balantac, 1994; Habermann & Stagge, 2010). The proliferation of nursing schools in the Philippines contributed to NCLEX-RN failures of almost half of PEN in the early 2000s (Aiken, 2007). The low performance among PEN is not a new phenomenon (Aiken, 2007; Aiken & Cheung, 2008) because, at present, more than half

of PEN are failing the NCLEX-RN exam (NCSBN, 2020). However, no studies were ever published to determine factors affecting the NCLEX-RN among PEN. Interestingly, Filipinos who studied nursing in the U.S. were also found to have lower NCLEX-RN pass rates (Seago & Spetz, 2005).

Among other IEN, Saudi Arabian nurses attribute their low NCLEX-RN pass rate to deficiencies in English language, test anxiety, and lack of application-based questions in Saudi nursing education (Bahari, 2015). Mexico's low NCLEX-RN pass rates for 30 years ascribed this to the secondary-level nursing curricula (Aiken, 2007), lack of psychiatric nursing in the curricula, lack of faculty members and clinical sites, limited English competency, and family responsibilities (Squires, 2017). In comparison to other Asian IEN, Korean nurses have higher NCLEX-RN pass rates (NCSBN, 2019) that can be attributed to the quality of Korean nursing education, accreditation, and licensure practices (Ko & Yu, 2019) and attending one to two years of review classes offered by their universities (Choe & Yang, 2009). However, Korean IEN reported that balancing work and family, lack of confidence, difficulty with the English language, lack of regard for nursing education and clinical experience as a student, information overload, and stress were hindrances to adequate NCLEX-RN preparation (Choe & Yang, 2009).

The NURS Model: A Guide in Organizing the Literature

NCLEX-RN outcome is a multifactorial phenomenon (Brodersen & Mills, 2014). The IEN's learning system and the nursing educational system are two interdependent systems that influence NCLEX-RN performance (Carrick, 2011), which are further affected by individual, academic, social, and environmental factors (Carthon, Nguyen,

Pancir, Chittans, 2015; Dewitty, Huerta, & Downing, 2016; Gates, 2018; Jeffreys, 2015; Metcalfe & Neubrander, 2016; Mooring, 2016; Relf, 2016; Scott & Zerwic, 2015; Zeran, 2016).

As the study aimed to investigate the experiences of IEN as they prepare for the NCLEX-RN, which was driven by the low NCLEX-RN pass rates in IEN, the literature provides possible reasons why nursing graduates fail the NCLEX-RN. Most of the studies on factors affecting NCLEX-RN success were on USEN. This is an understudied area among IEN, which is a significant gap in the literature. This study aimed to provide a conceptual base for understanding some of the factors influencing NCLEX-RN outcomes on IEN as viewed from the experience of Filipino nurses. This section summarizes the current literature on factors that affect NCLEX-RN success that is organized using the NURS model. Some of these factors were extrapolated from general IEN studies due to the limited literature specific to NCLEX-RN on IEN.

Individual Profile Characteristics

The literature shows that individual profile characteristics, such as age, gender, race, critical thinking, language, career choice, previous education, work experience, and psychological factors such as stress, test anxiety, confidence, and motivation influence NCLEX-RN outcome. A literature review of 81 studies from 1991 to 2017 reported that demographic factors influence NCLEX-RN outcomes (Banks et al., 2018). Use of the English language is the most commonly and consistently identified individual factor that has a significant influence on NCLEX-RN outcomes. Most of the studies on other individual factors reported contradictory findings. Majority of these studies were

conducted on USEN and there is little evidence on the association of IEN individual factors and NCLEX-RN outcomes.

Age. Previous studies have shown differences on the influence of age on NCLEX-RN outcomes. Some studies claimed that age is associated with NCLEX-RN passing, with older students more likely to pass the exam (Briscoe & Anema, 1999; Daley, Kirkpatrick, Frazier, Chung, & Moser, 2003; Vandenhouten, 2008), while Haas, Nugent, & Rule (2004) argued that younger students have higher chances of passing the NCLEX-RN. Other studies reported that age is not associated with NCLEX-RN success (Alameida et al., 2011; Giddens & Gloeckner, 2005; Kaddoura, Flin, Van Dyke, Yang, & Chiang, 2017).

There are more studies that reported the association of age and passing the NCLEX-RN, but with conflicting claims. Briscoe and Anema (1999) and Daley et al. (2003) both concluded that older students are more likely to pass the NCLEX-RN while Haas et al. (2004) claimed that younger students are more likely to pass the exam. Haas et al.'s (2004) finding is inconclusive because they claimed that NCLEX-RN passers are significantly younger but reported a p -value of $p=.097$.

For studies that claimed age as a non-significant finding on NCLEX-RN outcomes, differences in these findings can be attributed to the lack of variability in age between the two groups with NCLEX-RN pass/fail outcomes, as seen in the studies of Alameida et al. (2011) and Kaddoura et al. (2017). Giddens and Gloeckner (2005) concluded that age has no significant association with NCLEX-RN outcome, but did not

present a description table of the sample for further analysis. Based on these studies, the influence of age on NCLEX-RN outcome remains inconclusive.

As IEN may take the NCLEX-RN several years after graduating from nursing and passing their national NLE, maturation as part of the developmental process can facilitate NCLEX-RN outcome, especially when IEN are employed in nursing prior to sitting for the exam. The time lag, however, can also hinder their test outcome due to the tendency to forget learned knowledge in nursing school.

Gender. Several studies showed inconsistent results on its association with NCLEX-RN outcomes. Haas et al.'s study (2004) concluded that males have lower NCLEX-RN FTPR than females, but the finding is not statistically significant ($p = 0.064$). However, in their conclusion, they reported that men failed the exam at a significantly higher rate than women. In contrast, more studies argued that gender was not significantly associated with NCLEX-RN outcomes (Alameida et al., 2011; Giddens & Gloeckner, 2005; Hoffart et al., 2019; Kaddoura et al., 2017; Lockie et al., 2013).

The inconsistent results on the influence of gender on NCLEX-RN outcome can be attributed to the number of males in the sample, which is typical in nursing programs. The low proportion of males in the sample was acknowledged as a limitation in the studies of Giddens and Gloeckner (2005) and Kaddoura et al., (2017). Giddens and Gloeckner (2005) further reported that the gender distribution in their sample was similar between men ($n=22$) and women ($n=196$). Lockie et al. (2013) reported a 93.4% female in the sample size and argued gender as a non-significant factor in NCLEX-RN

outcomes, which can be inconclusive due to the underrepresentation of male (n=13) in the study.

International nursing students and the IEN population have more males compared to the U.S. nursing student and RN population (Dante et al, 2016; AACN, 2019). In a European study of nursing students, as many as 26.4% were males (Dante et al., 2016). An investigation on the influence of gender needs to be conducted on a sample with larger proportion of males to produce a more valid statistical significance. There were no studies conducted to determine the association between gender and IEN NCLEX-RN outcomes.

Race. In studies involving USEN, ethnicity or race is a predictor of NCLEX success and is associated with NCLEX-RN passing, where Whites are more likely to pass the NCLEX-RN than any other race or ethnicity (Alameida et al., 2011; Briscoe & Anema, 1999; Daley et al., 2003; Lockie et al., 2013; Sayles, Shelton, & Powell, 2003). There is a negative relationship between the percentage of Hispanic students (Crow, Handley, Morrison, & Shelton, 2004), African American (Haas et al., 2004; Kaddoura et al., 2017; Lockie et al., 2013; Seago & Spetz, 2005), Asian students (Haas et al., 2004) such as Filipinos (Seago & Spetz, 2005), and international students from Africa (Briscoe & Anema, 1999) and NCLEX-RN FTPR. Furthermore, Spetz and Seago (2005) reported that despite attending remediation and support services, diverse students still have lower NCLEX-RN pass rates.

Results on these studies showed variations on the role of race or ethnicity in influencing NCLEX-RN outcomes. One possible explanation is the underrepresentation

of minority nursing students in the sample seen in some studies (Daley et al., 2003; Haas et al., 2003; Kaddoura et al., 2017). While Lockie et al. (2013) reported a significant difference between NCLEX-RN outcomes on White and Blacks, the underrepresentation of Hispanic (n=2) and Asian (n=2) nursing students in the sample limited the inclusion of these two ethnic groups in the analysis. Multicollinearity was also present in their study, thus, yielding non-significant result. Another limitation on the generalizability of these results is the population of the study, associate degree nursing (ADN) students, which is different from the focus of this study, baccalaureate prepared nurses.

Language. Language is the most common factor identified in the literature that affects and predicts NCLEX-RN success on IEN. Two integrative reviews of 98 studies from 2003 to 2013 reported that language is a significant issue for IEN (Moyce et al., 2016; Primeau, Champagne, & Lavoie-Tremblay, 2014). Previous studies claimed that IEN from Korea, Mexico, and Saudi Arabia had negative outcomes on the NCLEX-RN due to language (Bahari, 2015; Cheo & Yang, 2009; Lujan & Little, 2010; Marcus et al., 2014; Schipiour, 2016; Squires et al., 2016).

In contrast, the use of English as a primary language and nursing education in Canada and the United Kingdom (U.K.) are predictors of NCLEX-RN success ($p < .001$). English-speaking countries have 12-13% higher ($p = 0.002$) NCLEX-RN FTPR compared to non-English speaking countries (Davis & Nichols, 2002; Squires et al., 2016). However, Canadian examinees argued that translating the NCLEX-RN from English to French contributed to failing the NCLEX-RN when it was adapted in Canada in 2015 (McGillis Hall et al., 2016; Petrovic, Doyle, Lane, & Corcoran, 2019).

The inherent bias of the English language against IEN in standardized exams, such as the NCLEX-RN, indicates that language may be a source of construct-irrelevant variance (Bosher & Bowles, 2008). IEN speak, read, and write in languages other than English and their proficiency of the English language vary. The medium of instruction in nursing schools internationally also varies. This variation in English language proficiency and medium of instruction affect comprehension and analysis of test questions. Some English words may have different contextual and cultural meanings that may significantly affect interpretation of the sentence or entire test question. Because of these reasons, Johnston (2001) claimed that 20 percent of the variance in the ability to pass the NCLEX-RN could be related to language. Thus, the NCLEX-RN may not accurately measure the nursing knowledge of IEN.

The finding of language as a factor and predictor for IEN is similar to USEN NCLEX-RN studies. English as a first language for USEN influenced successful NCLEX-RN passing (Chen & Bennett, 2016; Kaddoura et al., 2017; Williams, Bourgault, Valenti, Howie, & Mathur, 2018) and predicted NCLEX-RN success (Sears et al., 2015). The use of English as second language predicted NCLEX-RN failure on USEN (Breckenridge, Wolf, & Roszkowski, 2012; Dudas, 2011; Eddy & Epeneter, 2002; Hansen & Beaver, 2012; Kaddoura et al., 2017; Olson, 2012; O'Neill, Marks, & Liu, 2006; Silvestri, Clark, & Moonie, 2013). It is interesting to note that regardless where Filipinos received their nursing degree, there seems to be a cultural or ethnic association with NCLEX-RN as reflected in Seago and Spetz's (2012) study, which claimed that California schools with higher percentage of Filipino ethnicity have lower NCLEX-RN

FTPR. Today, standardized exams are still found to be negatively associated with minority students and those who do not speak English as a primary language.

These findings consistently reflect the significant influence of language on passing the NCLEX-RN. Findings from CGFNS studies (Davis & Nichols, 2002) and Squires et al.'s (2016) 11-year (2003 to 2013) random effects panel data analysis of 200,453 IEN from 177 countries who took the NCLEX-RN provide strong evidence on the predictive ability of the English language on NCLEX-RN success. This finding is significant to the population of this proposed study since 58% of the IEN in Squires et al.'s (2016) study were nurses educated in the Philippines.

Although these consistent findings about language and its influence on NCLEX-RN outcome have significant implications for IEN, some of these studies have methodological issues that limit the generalization of findings. Bahari's (2015) literature review identified language proficiency as one of the factors that affected Saudi graduates' performance in the NCLEX-RN but failed to identify the number of studies that were reviewed. Inadequate sample size ($n=20$) was a limitation in Lujan and Little's (2010) study of Mexican nursing graduates. Squires' (2017) study over a five-year period had a limited sample size ranging from one to 15. The two integrative or systematic reviews that included 98 studies from 2003 to 2013 offered strong evidence that language is an obstacle on IEN for transitioning to western nursing practice (Moyce et al., 2016; Primeau et al., 2014). However, both studies focused on general communication issues affecting the transition of IEN into the U.S. and did not report any influence of language on NCLEX-RN. A presentation of matrices of the related studies would have been

helpful to further evaluate the methodologies and findings of the two reviews and to determine whether some of those studies measured NCLEX-RN outcomes on IEN.

Employment in healthcare or nursing work experience. IEN have different contextual backgrounds because most are licensed professional and practicing nurses in their countries before taking NCLEX-RN. In Covell et al.'s study (2017) on Canadian NCLEX-RN, IEN with three to five years of work experience have increased odds of passing the exam (OR=1.612, 95% CI [1.252, 2.075]) compared to those with less than one year of work experience. Korean nurses claimed that balancing work and preparing for the NCLEX-RN was a deterrent on their test outcome (Choe & Yang, 2009). A multi-country European study on nursing students revealed that they worked 18 to 34 hours a week due to economic difficulties (Dante et al., 2016). Although this was not measured against NCLEX-RN outcomes, it sheds light on the contextual and educational background of IEN. Studies on USEN also argued that previous healthcare experience is negatively associated with academic performance (Khareedi, 2018; Wambuguh, Eckfield, Van Hofwegen, 2016; Wray, Aspland, Barrett, & Gardiner, 2017).

Results on the influence of employment on NCLEX-RN passing is significant for IEN since most of them work as staff nurses in their respective countries prior to taking the NCLEX-RN. However, there are very limited studies on this association. Only Covell et al.'s (2017) study measured the impact of work experience on IEN NCLEX-RN outcomes. Work experience helps IEN apply previously learned nursing knowledge and skills in clinical practice when they take the NCLEX-RN (Covell et al., 2017).

More studies on work experience argued that previous health care experience has negative association with academic outcomes (Khareedi, 2018; Wambuguh et al., 2016; Wray et al., 2017). The influence of health care experience is indirectly inferred to have a negative association with NCLEX-RN outcome since the former has negative association with academic performance. In this case, academic performance can be explained as a mediator, which supports studies arguing that academic performance is significantly associated with NCLEX-RN outcome (Alameida et al., 2011; Banks et al., 2018; Brodersen & Mills, 2014; Gilmore, 2008; Kaddoura et al., 2017; Kidder, 2015; Romeo, 2013; Sears et al., 2015).

This negative association can also be related to long work hours, which can be a barrier when IEN need time to study for the NCLEX-RN. Working while preparing for the NCLEX-RN results in increased demand on an individual's time and responsibilities. This indirectly supports other studies that reported employment of more than 16 hours per week has a negative impact on academic performance (Mthimunya & Daniels, 2019; Salamonson et al., 2014). Another explanation is that the health care experience may be one that does not require cognitive tasks and skills (Khareedi, 2018) that are relevant to critical thinking, a skill that is needed to be successful on the NCLEX-RN. With these inconclusive results, the influence of work experience on NCLEX-RN warrants further investigation.

Differences in nursing practice. The majority of IEN practice as professional nurses in their home countries, which have different nursing practice situations and environments compared to the U.S. (Lin, 2014; Lurie, 2016; McGillis Hall et al., 2015;

Palmer et al., 2019; Rosenkoetter, Nardi, & Bowcutt, 2017). There is an abundance of qualitative literature on the differences in nursing practice and how they affected IEN transition into the U.S. workforce. Despite the number of PEN in the global nursing workforce, there are only seven studies that were conducted on PEN work experiences. These include five qualitative and two mixed methods studies (Montayre, Montayre, & Holroyd, 2018). Four of the seven studies were conducted in the U.S. and Canada while the other three were done in the U.K., which does not require NCLEX-RN. The limited studies on PEN can be an impetus for further research.

Petrovic et al. (2019) and four systematic reviews of 122 IEN studies from 2003 to 2016 further provide evidence that differences in nursing practice are barriers for IEN (Montayre et al., 2018; Moyce et al., 2016; Primeau et al., 2014; Viken, Solum, & Lyberg, 2018). Primeau et al. (2014) identified differences in technology, nursing practice, and cultural differences as barriers that IEN encounter. Montayre et al.'s (2018) study is relevant to the population in this proposed study since it provided a general nursing perspective about the PEN's experiences internationally. However, they did not describe IEN NCLEX-RN experiences. While the integrative review did not explicitly refer to the NCLEX-RN, those are important factors to explore as possible barriers that may impact IEN test outcomes.

Using institutional ethnography, Petrovic et al. (2019) expressed concerns about the implementation of NCLEX-RN in Canada due to the differences between Canadian and U.S nursing practice. This concern stemmed from the decrease in the Canadian NCLEX-RN national FTPR from 87% to 69.7% when it was first conducted in 2015. A

major argument on this claim is the presence of other factors, such as the first-time use of computer adaptive testing and translation issues from English to French. Since these findings came from a qualitative study, future studies using quantitative or mixed methods research can offer empirical evidence on the impact of other factors on the Canadian NCLEX-RN FTPR.

Viken et al. (2019) reported unfamiliar nursing practice as one of the two main themes after conducting a systematic review of 17 qualitative articles of IEN experiences. Seven of these studies were conducted in the U.S. While this review provides a good context of differences in nursing practice for the study population, nothing was mentioned about NCLEX-RN, which further justifies the need to conduct studies on IEN and the NCLEX-RN. One of the studies in this review (Jose, 2010) mentioned about the limited research on IEN in the U.S.

Mazurenko, Gupte, and Shan (2014) refuted that IEN and USEN have differences in work experiences. In a 10-year trend study using the National Survey of Registered Nurses (NSRN) from 1988 to 2008, the authors concluded that both groups of nurses, IEN and USEN, have similar work experience, using the Cochran-Armitage trend tests. Mazurenko et al. (2014) provided reasons for this argument, which include: 1) IEN have at least three more years of work experience than the USEN; 2) IEN have more diverse work experiences; 3) IEN are advancing their education.

While Mazurenko et al. (2014) provided an interesting argument, this is the only study that claimed similarity in work experiences between IEN and USEN. In contrast to the qualitative IEN studies conducted by Montayre et al. (2018), Moyce et al. (2016),

Petrovic et al., (2019), Primeau et al. (2014), and Viken et al. (2018), which focused on the transition of new IEN, Mazurenko et al. (2014) performed a secondary data analysis on the work experiences of IEN based on the U.S. National Survey of Registered Nurses. Therefore, it is not clear whether the database included IEN who were both new and had been working in the U.S. for a certain time. et al. (2014) focused on quantitative comparisons of IEN and USEN trends in length and location of work experiences, which has a different context from the qualitative studies “work experiences”.

Generally, IEN initially practiced nursing in a non-U.S. health care environment, where established standards of practice are different. For instance, nursing care in the Philippines is more technical and is based on the medical model, with a narrower scope of practice and autonomy compared to the holistic nursing care model in the U.S. (Smith & Ho, 2014). Variations in the use of technology in health care, patient conditions, scope of nursing practice, and other health care resources can alienate IEN when they encounter U.S.-based NCLEX-RN clinical scenarios. This difference in practice may serve as a deterrent to the cognitive reasoning of the IEN, which are needed to be successful on the NCLEX-RN. The presence of limited resources and differences in nursing practice in their home countries may affect their preparation for the NCLEX-RN.

In summary, the majority of the literature that investigated the influence of individual characteristics identified language as the most common and consistent factor that influenced IEN NCLEX-RN outcome. Demographic variables such as age, gender, and race or ethnicity were inconclusive in their association with NCLEX-RN outcomes due to methodological issues such as limited sample size, unequal distribution of

samples, and underrepresentation of certain groups such as males and minority students. It was noted that investigating demographic variables on NCLEX-RN studies was more common in older studies. Newer studies analyzed the impact of other contextual factors such as length and quality of work experiences on NCLEX-RN outcomes.

Furthermore, there is abundance of qualitative studies that identified barriers faced by IEN in their work transition, but barriers related to licensure need to be explored. The science is very limited in the number of quantitative studies to measure the influence of these barriers on NCLEX-RN. Since most of these studies that directly investigated individual characteristics on NCLEX-RN were conducted on USEN, the current state of the science is limited on exploring their influence on IEN.

Affective Factors

Affective factors that were identified in the literature that may influence NCLEX-RN outcomes include critical thinking, clinical judgment, stress, anxiety, confidence, motivation, and self-efficacy.

Critical thinking and clinical judgment. Critical thinking is a significant factor to consider since the NCLEX-RN requires clinical judgment and application of theory into practice. Clinical judgment is a core cognitive attribute in nursing and a direct outcome of critical thinking (NLN, 2010). Critical thinking and clinical judgment are required to become successful in the NCLEX-RN because the examination requires application and analysis of clinical information that is needed to make safe and effective clinical judgments in dealing with simulated clinical situations. The development of critical thinking and clinical judgment is largely influenced by the quality of instruction

received prior to and in nursing school. Differences in nursing curriculum, teaching strategies, as well as student and faculty characteristics are potential sources for wide variation in critical thinking and clinical judgment.

Critical thinking is widely used in U.S. nursing education as reflected in the curriculum, didactic and clinical teaching styles, type of questioning in classroom tests, and in the NCLEX-RN. The NCLEX-RN itself is a test of critical thinking and clinical judgment. Meanwhile, although the Philippine nursing education system prescribes a standard competency-based community-oriented, didactic teaching and testing are mainly at knowledge and comprehension levels with less critical thinking, while clinical teaching is more task-based teaching rather than teaching critical thinking or clinical judgment. There is a huge gap between what nursing students in the Philippines learn in their theoretical foundations and clinical knowledge versus what they are learning in clinical (Factor, Matienzo, & de Guzman, 2017).

There were several studies on critical thinking and clinical judgment and its association on NCLEX-RN outcome. Half of these were conducted on USEN, few were reports on IEN, and one study was a systematic review. Critical thinking is a strong predictor of NCLEX success on USEN (Banks et al., 2018; Giddens & Gloeckner, 2005; Hoffman, 2009; Romeo, 2013; Sears et al., 2015). However, Lyons (2008) reported that the critical thinking score is not a predictor of NCLEX-RN success. Studies on critical thinking on IEN are limited, although Bohnen and Balantac (1994) reported in their foundational IEN study that there were enormous variations in teaching critical thinking in international nursing curricula. Bahari (2015) and Peisachovich (2015) found that

regardless of education and experience, IEN enter the U.S. nursing workforce as novice health practitioners who do not meet expectations for clinical judgment. They have difficulty applying theory to practice. Additionally, critical thinking is also an area of weakness identified in Chinese IEN (Xu, 2010).

While these studies showed significant results, there were limitations in the generalizability of the findings. Studies on critical thinking of IEN were literature reviews (Bahari, 2015; Xu, 2010) and one qualitative study (Peisachovich, 2015). The two literature reviews did not specify the sources and number of studies reviewed. The literature reflects the lack of quantitative evidence on the influence of critical thinking on their IEN NCLEX-RN performance.

The available quantitative studies were all conducted on USEN; however, they have threats to internal and external validity. The reliability coefficients of research instruments used to measure critical thinking were not known in the Giddens and Gloeckner's (2005) and Romeo's (2013) studies. This information is critical in determining the reliability of research instruments, which is essential in establishing the internal validity of the results of the study (Waltz, Stickland, & Lenz, 2017). Convenience sampling and underrepresentation of the NCLEX-RN "fail" group in Giddens and Gloeckner (2005) study limited representativeness and power, which may have affected the internal validity of the results (Waltz et al., 2017). They further acknowledged that through discriminant analysis, their study failed to predict 79% of the NCLEX-RN failures. Thus, other factors can be accounted for as possible reasons for failing the exam. Romeo's (2013) study focused on associate degree nursing (ADN)

students, which is a limitation in generalizing the study to the BSN population. This is relevant to the study since PEN are all BSN-prepared, thus caution should be taken in generalizing to this population. Construct-irrelevant variance such as test fatigue (Waltz et al., 2017) may have accounted for some variation in the same study since the measurement was conducted in April of the final semester of nursing school. Furthermore, a systematic review of 17 studies that were published from 1984 to 2015 reported variances in the relationship between critical thinking and NCLEX-RN success (Sears et al., 2015).

The relevance of critical thinking in determining NCLEX-RN outcome has been investigated on USEN, but not on IEN. With the low NCLEX-RN performance of IEN, there is a need to study IEN critical thinking and its impact on NCLEX-RN outcome.

Stress. Studies on USEN posit that stress is inversely associated with NCLEX-RN success (Kasprovich & VandeVusse, 2018; Sayles et al., 2003; Sears et al., 2015). Psychological, physical, and financial stresses are factors affecting NCLEX-RN preparation among Korean nurses (Choe & Yang, 2009). Moreover, some IEN are already licensed in their home countries and taking another nurse licensure exam, such as the NCLEX-RN, can be financially and psychologically stressful (Eder, 2016). Tipton et al. (2008), on the contrary, argued that stress does not affect NCLEX-RN outcomes. However, the ability to manage stress can influence test outcomes. In a study that compared coping between those who passed and failed the NCLEX-RN, those who passed were able to manage their stress better than those who failed (Eddy & Epeneter, 2002).

The influence of stress on NCLEX-RN was more commonly studied on USEN but resulted in inconsistent results. Sears et al.'s (2015) systematic review of 17 articles reported the inverse relationship between stress and NCLEX-RN performance. However, there were variations in the findings related to stress. The review did not specify the number of studies that reported stress nor show a matrix of the articles to allow further analysis. Moreover, the authors mentioned that 17 articles were reviewed for meta-analysis but there were no results presented that show any statistical analysis.

The limitations on Sayles et al.'s (2003) study are related to the population of ADN students, use of self-reports in determining previous education, and lack of psychometric properties on the instrument to measure social skills. Applying the results from an ADN sample limits its generalizability to the BSN population. The use of self-reports and the lack of reliability coefficients can undermine both the internal and external validity of the study (Waltz et al., 2017). Qualitative studies (Eddy & Epeneter, 2002; Kasprovich & VandeVusse, 2018) explored the presence of stress before and during the examination and its influence on test outcomes but the qualitative nature of these studies limit the generalizability of the results. Although Tipton et al. (2008) claimed that stress is not associated with NCLEX-RN outcomes among ADN students, it cannot be generalized to the BSN population. Their use of chi-square violated the required minimum sample ($n=5$) per cell with $n=1$, $n=2$, and $n=4$ in some cells, which further limits the external validity of the findings.

Other than Choe and Yang's (2009) qualitative study on Korean nurses, no other studies were conducted on the influence of stress on NCLEX-RN outcomes among IEN.

This is another gap in the literature of IEN and NCLEX-RN studies, which this study explored.

Anxiety/Test anxiety. Anxiety negatively impacts academic testing and NCLEX-RN outcome (Alizadeh et al., 2014; Bahari, 2015; Gibson, 2014; Kasprovich & VandeVusse, 2018; Li, Li, Dou, & Wang, 2015; Mc Farquhar, 2014; Roykenes, Smith, & Larsen, 2014; Woo, Wendt, & Liu, 2009). It is one of the barriers to NCLEX-RN success that was identified by IEN from China (Li et al., 2015), Iran (Alizadeh et al., 2014), Norway (Roykenes et al., 2014), and Saudi Arabia (Bahari, 2015). Li et al. (2015) reported the presence of anxiety in 1,527 Chinese students, with almost 90 percent having moderate to severe levels of anxiety before the NCLEX-RN.

There were few studies that investigated the influence of test-taking anxiety on IEN NCLEX-performance. These are relevant findings but threats to internal and external validity were identified. Alizadeh et al.'s (2014) study on Iranian students was not nursing-specific and was limited to academic testing, not NCLEX-RN. The sample was composed of students from allied health programs, such as midwifery and medical emergency. Although this provides understanding on the influence of anxiety on testing on IEN, it limits its applicability to NCLEX-RN. They described a 37-item Sarason test anxiety questionnaire and mentioned a Cronbach's alpha coefficient of 0.746, which was not clear whether that is the reliability coefficient of the entire instrument or the subscales. This measurement information is critical in establishing the reliability of the instrument because the use of alpha coefficient for the entire instrument, instead of each subscale or domain, is a violation of dimensionality in measurement (Waltz et al., 2017).

Li et al. (2015) studied the influence of anxiety on NCLEX-RN among Chinese nursing students. The study revealed a high incidence and level of anxiety among the 1,527 students but instrument measurement was a limitation. Although the Chinese version of the Test Anxiety Scale was pilot tested, they did not describe the instrument and report instrument translation procedures. Rather, they stated an alpha coefficient of 0.68, which is uncertain if it is a scale or subscale reliability coefficient that can affect the reliability of the instrument (Waltz et al., 2017). Similar instrumentation issues on instrument translation process and failure to report the instrument's psychometric properties were identified in Roykenes et al.'s (2014) study among Norwegian nursing students when they measured the levels of anxiety among the students prior to a test. Furthermore, Woo et al. (2009) claimed that 6% of IEN in their 243 samples had test anxiety. In their study, self-report was used to identify the prevalence of anxiety, which can be a source of bias.

Identifying anxiety on IEN is significant in understanding its influence on testing but the findings cannot be generalized due to major measurement issues that can impact the reliability and validity of the study. These observations thus limit the interpretation on the influence of test anxiety on test outcomes. To address these issues, authors need to describe the instrument, its translation and scoring procedures, scales and subscales, and to report reliability coefficients appropriately. Identifying and addressing instrument measurement issues are critical in ensuring the validity and reliability of any study (DeVellis, 2017; Waltz et al., 2017).

Confidence, motivation, and self-efficacy. Choe and Yang's (2009) study on Korean IEN showed that lack of confidence and lack of regard for education negatively contributed to their performance on the NCLEX-RN. Respondents in the study regretted not being motivated enough to study harder when they were in nursing school. They stated that they would have passed the NCLEX-RN if they studied well. In Woo et al.'s (2009) study, 11 percent of IEN expressed concerns about not being confident in their ability to pass the NCLEX-RN. Hackney (2017) claimed that internal or external motivation scores did not predict NCLEX-RN outcomes. On the other hand, perceived self-efficacy is a predictor of NCLEX-RN passing (Silvestri et al., 2013). Concerns about confidence in taking the NCLEX-RN adversely affected test outcomes (Eddy & Epeneter, 2002; Kasprovich & VandeVusse, 2018). Students who didn't perceive any barriers to their nursing education have higher chances of passing the NCLEX-RN (Williams et al., 2018). These affective factors and their impact on IEN NCLEX-RN outcomes have not been extensively studied.

Investigating the influence of confidence, motivation, and self-efficacy on IEN NCLEX-RN outcomes is relevant but caution must be taken when generalizing the findings. There were only two studies conducted on IEN on this area, which reflects an understudied area. Data on self-confidence from Korean nurses and other IENs were collected qualitatively through interviews and quantitatively through self-report instruments (Choe & Yang, 2009; Woo et al., 2009). Self-reports can be a source of bias while qualitative data reduces generalizability of results (Polit & Beck, 2017). Hackney (2017) reported in a study of U.S. nursing students that the level of intrinsic motivation

for learning was higher among those who passed the NCLEX-RN. However, the limitation of this study is on its applicability to the IEN population, where different contextual characteristics may have an influence on their motivation.

Overall, the current literature on the influence of affective factors on IEN NCLEX-RN experiences is very limited. Stress, anxiety, and confidence were investigated, but studies are limited in quantity and scope. Critical thinking is a significant predictor of NCLEX-RN outcome but there were no studies conducted on IEN. This gap in the literature needs to be examined. The majority of available studies that investigated the association of affective factors on NCLEX-RN outcome were conducted on USEN but their findings have limited generalizability to the IEN population due to variations in context, sample size and representativeness, and instrument measurement issues. Thus, this study explored how IEN affective factors influence their NCLEX-RN outcomes based on their personal experiences.

Academic Factors

Previous studies reported differences in nursing education, curriculum, nursing courses, test-taking strategies, and unfamiliarity with the NCLEX-RN as academic factors that affect performance in the NCLEX-RN. However, the influence of academic factors on IEN NCLEX-RN outcomes has not been empirically investigated. The majority of studies that examined the influence of academic factors on NCLEX-RN were conducted on USEN. These studies reported that program GPA, standardized tests, nursing course grades, nursing courses with C or lower, and withdrawals and failures in nursing courses were significant predictors of passing the NCLEX-RN (Amankwaa,

Agyemang-Dankwah, & Boateng, 2015; Banks et al., 2018; Bentley, 2006; Kaddoura et al., 2017; McCarthy, Harris, & Tracz, 2014; Wambuguh et al., 2016; Williams et al., 2018; Xiao, Wu, Lin, & Zhang, 2014). Standardized admission tests such as the Test of Essential Academic Skills (TEAS; Robert, 2018; Wambuguh et al., 2016) and course-specific standardized tests in medical-surgical nursing, fundamentals of nursing, and psychiatric nursing (Alameida et al., 2011; McCarthy et al., 2014; Yeom, 2013) are predictive of NCLEX-RN success. End-of-program predictive testing is associated with high NCLEX-RN FTPR (Alameida et al., 2011; Banks et al., 2018; Brodersen & Mills, 2014; Brussow & Dunham, 2018; Chen & Bennett, 2016; Kaddoura et al., 2017; McCarthy, 2014; Shoemaker, Chavez, Keane, Butz, & Yowler, 2017). Students who did not perceive the presence of barriers to completing their nursing degrees were found to be more likely to pass the NCLEX-RN (Williams et al., 2018).

Differences in nursing education. The NCLEX-RN evaluates the knowledge and competency of nurses educated in the U.S. thus, it is biased towards nurses trained in the American educational and healthcare context (Squires et al., 2016) and a disadvantage for IEN. Studies claim that there are wide variations in IEN and USEN nursing education (Lu & Kitt-Lewis, 2018; Mazurenko, et al., 2014; Muraraneza, Mtshali, & Mukamana, 2017; Nair & Rujan, 2017; Petrovic et al., 2019; Salfi & Carbol, 2017; Smith & Ho, 2014). Two integrative reviews of 98 studies supported this claim and reported that differences in nursing education are an obstacle for IEN (Moyce et al., 2016; Primeau et al., 2014). The differences in nursing education provide a possible explanation on the wide variation of NCLEX-RN FTPR for IEN. Furthermore, IEN nursing education has

variations in curriculum and pedagogical approaches, scope of nursing practice, and competencies on safety and quality, teamwork, delegation, informatics, and technology (ICN, 2012; Lu & Kitt-Lewis, 2018), which are essential concepts in the NCLEX-RN.

A foundational IEN study by Bohnen and Balantac (1994) concluded that there are differences and gaps in IEN nursing education and highlighted academic deficiencies as a cause of their low NCLEX-RN passing rates. This is the earliest and one of the most comprehensive analyses of IEN education and its association with the NCLEX-RN. More recent studies identified areas of academic deficiencies (Bahari, 2015; McGillis Hall et al., 2015; Hou et al., 2019; Li et al., 2015; Lurie, 2016; Primeau et al., 2014; Schipiour, 2016) in nursing process utilization (Ho, 2015), medical terminology (Choe & Yang, 2009), technology (Lurie, 2016), and performance expectations related to autonomy and delegation (McGillis Hall et al., 2016), knowledge in laboratory test interpretation, and on medications and medication administration (ICN, 2012; Lu & Kitt-Lewis, 2018; Lurie, 2016; McGillis Hall et al., 2016; Sherwood & Shaffer, 2014; Squires, 2017; Squires et al., 2016). These academic areas are relevant to explore among IEN because they cover a major part of the NCLEX-RN.

A meta-synthesis of 13 studies on global nursing curricula from 2005 to 2015 revealed that nursing education is outdated, irrelevant, poorly designed, and overloaded. The global nursing curricula are mainly at the level of secondary education, which produces inadequately prepared graduates with limited technical skills and lack of broad contextual perspectives (Muraraneza et al., 2017). India has diploma and baccalaureate nursing programs while China has three nursing programs, the mid-associate, associate,

and baccalaureate degrees (Lu & Kitt-Lewis, 2018; Nair & Rujan, 2017; Shaffer & To Dutka, 2012). In Mexico, nursing is offered at a high school level, although changes have been made to teach nursing at the college or university level (Aiken, 2002; Shaffer & To Dutka, 2012). Haiti offers nursing as a diploma program and a bachelor's degree while the Philippines only offers a bachelor's degree (Garfield & Berryman, 2012; Shaffer & To Dutka, 2012) and Nigeria offers multiple fragmented routes of nursing education (Makata et al., 2016). The differences in academic preparation is a significant reason for the variation in IEN nursing knowledge and NCLEX-RN outcomes.

Researchers from the Philippines and India reported concerns about the deterioration of the quality of nursing education in recent studies (Bautista et al., 2018; Nair & Rajan, 2017; Rosales et al., 2014). This deterioration is significant to note since these are the primary source countries of IEN for the U.S. (Shaffer et al., 2018). They are the top sources of international applicants on the NCLEX-RN, accounting for almost 70% of all IEN applications (NCSBN, 2019).

There are several reasons that can explain the concern about Philippine nursing education. A qualitative study conducted among Filipino nursing students identified the presence of structural, pedagogical, and relational deficits in their nursing education (Factor et al., 2017). Incongruity in classroom instruction and clinical practice created a theory-practice gap during the students' clinical practicum, which was considered a major issue among senior nursing students (Factor et al., 2017). Marcus et al. (2014) claimed that nursing schools in the Philippines face shortage of qualified nursing faculty due to lack of educational qualifications of both existing and potential faculty and migration to

other countries. In addition, Masselink and Lee (2010) criticized the commercialization of nursing education in the Philippines. They claimed that the collaboration among nursing schools, nursing review centers, and international employers has created a mechanism where nursing education is designed to be more relevant to the global market than its domestic needs. This deviation of focus in the nursing curriculum has also been implicated as a cause of deterioration of nursing education in the country.

Moreover, the research of Bautista et al. (2018), Montegrigo (2019), and Rosales et al. (2014) are the only three published national studies on the state of nursing education in the Philippines based on the Philippine Nurse Licensure Examination (PNLE) results from 2006 to 2018. While the findings are significant in providing explanation on the educational background on PEN, they did not directly address the NCLEX-RN. Understanding this educational background for PEN is critical since more than half of international NCLEX-RN applications come from the Philippines.

The implications in understanding the variation in IEN educational preparation is critical in providing explanations of their low NCLEX-RN performance. However, significant changes in the global nursing curricula have taken place since the study was conducted. There are no recent studies of an international scale that were conducted to assess IEN education and its influence on IEN NCLEX-RN performance. The current science on this area is very limited to country-specific studies on their respective nursing curricula.

Muraraneza et al.'s (2017) meta-synthesis provided a significant perspective on global nursing education but it did not report how these influence NCLEX-RN outcomes

internationally. Country-specific research that examined its nursing education is limited to Canada (McGillis Hall et al., 2015), China (Hou et al., 2019; Li et al., 2015; Lu & Kitt-Lewis, 2018), Haiti (Garfield & Berryman, 2012), India (Nair & Rajan, 2017); Nigeria (Makata et al., 2016), Mexico (Squires, 2017), Philippines (Bautista et al., 2018; Rosales et al., 2014), Saudi Arabia (Bahari, 2015), South Korea (Choe & Yang, 2009), and the U.K. (Benton, 2017). However, most of these are reports describing the different types of nursing educational programs in their respective countries. Moreover, no study investigated the impact of the country's nursing education on NCLEX-RN outcomes.

Thus, an exploration of more recent developments in global nursing curricula is essential in understanding IEN educational backgrounds and how they influence NCLEX-RN outcomes. This study provided new insight as it explored how IEN educational backgrounds influence their NCLEX-RN performance.

Curriculum. Variations in IEN nursing curricula can produce differences in nursing knowledge. Differences in curricular content, focus on the medical model, and lack of psychiatric nursing in nursing programs in China, Mexico, and most eastern European countries may have affected IEN NCLEX-RN outcomes from those countries (Bahari, 2017; Bohnen & Balantac, 1994; Hou et al., 2019; Li et al., 2015; Muraraneza et al., 2017; Shaffer & To Dutka, 2012; Squires, 2017; Xu, 2010). U.K.-educated nurses claim that their nursing curriculum is a reason for low British nurses' NCLEX-RN pass rates citing that while the U.S. covers general nursing inclusive of adult health, pediatric health, mental health, and pediatric health, the U.K. nursing curriculum teaches the four clinical fields separately (Benton, 2017). Studies on Philippine (Smith & Ho, 2014) and

Taiwanese IEN (Ho, 2015) revealed that assessment is an area of weakness while Chinese IEN identified management and delegation as areas of weakness (Xu, 2010). Issues on content and context of the exam were claimed to be a factor that caused a drop in the Canadian NCLEX-RN FTPR (McGillis Hall et al., 2016). The differences in curricular focus and lack of critical concepts in the nursing curriculum can justify the variations in nursing knowledge and competencies on IEN.

Few countries have designed their curriculum to be more relevant based on the needs of the global nursing labor market. India and the Philippines have nursing curricula designed to train students for the U.S. and other Western countries (Masselink & Lee, 2010; Ortiga, 2014; Nair & Rajan, 2017). South Korea's nursing schools have programs that forged a partnership with U.S. hospitals for their students' training (Brush, 2008). These are essential in developing a familiarity of IEN with U.S. nursing practice and the NCLEX-RN. Vestal and Kautz (2009) claimed that similarities in U.S. and Philippine nursing education and training might help Philippine IEN pass the NCLEX-RN.

Although the Philippine nursing standardized curriculum was patterned after the U.S.' nursing curriculum, there are major differences between the two. The 192-credit hour B.S.N. curriculum in the Philippines (CHED, 2017) has 57% more academic load than the U.S. baccalaureate nursing curriculum. The focus on the medical model instead of the holistic and concept-based U.S. nursing curriculum and the absence of NCLEX-RN categories of client needs as a framework in the Philippine nursing curriculum may

account for variances in NCLEX-RN outcomes. However, this claim has not been investigated. This is a gap in the literature was investigated in this study.

Nursing courses. The association between nursing courses and NCLEX-RN outcomes was extensively examined in USEN studies but not on IEN. Among the very few IEN NCLEX-RN studies, pharmacology and dosage calculations, pathophysiology, and fluids and electrolytes were identified as challenging nursing courses and concepts (Davis & Nichols, 2002; Mathew, McFarquhar, & Wright, 2015; Squires, 2017; Squires et al., 2016). The difficulty in dosage calculations may be related to the difference in the measurement system in the U.S. and other countries (Davis & Nichols, 2002). Interestingly, psychiatric nursing is reportedly the most common deficiency found in IEN nursing curricula (Shaffer & To Dutka, 2012; Squires, 2017; Xu, 2010).

Grades in specific nursing courses were found to predict NCLEX-RN outcomes on USEN (Banks et al., 2018; Englert, 2009). Pharmacology (Alameida et al., 2011; Emory, 2013), medical-surgical nursing (Alameida et al., 2011; Banks et al., 2018; Daley et al., 2003; Herrera & Blair, 2015; McCarthy et al., 2014; Schooley & Khun, 2014; Seldomridge & Di Bartolo, 2004; Silvestri et al., 2013), maternity nursing (Alameida, 2011; Schooley & Kuhn, 2014), pediatric nursing (Schooley & Kuhn, 2014), and mental health (Banks et al., 2018) were found to have strong associations with NCLEX-RN passing. Medical-surgical nursing is critical in understanding difficult nursing concepts and passing the NCLEX-RN (Herrera & Blair, 2015). Theoretical foundations of nursing (Alameida et al., 2011; Sears et al., 2015), fundamentals of nursing (Sears et al., 2015; Uyehara, Magnussen, Itano, & Zhang, 2007), and health assessment (Alameida et al.,

2011; Penprase & Harris, 2013) were likewise found to be predictors of NCLEX-RN success.

The predictive ability of these courses was found to vary based on program type. Adult health or medical-surgical nursing, maternity nursing (Simon & Augustus, 2009), and pathophysiology (Landry, Davis, Alameida, Prive, & Renwanz-Boyle, 2010; Seldomridge & Di Bartolo, 2004) were found to be more predictive among BSN students compared to associate degree students. This is a variable that can be further explored in this study, whether it has influenced their NCLEX-RN performance, considering that pathophysiology and medical-surgical concepts comprise more than half of the NCLEX-RN test plan. These concepts cover various client needs categories such as Physiologic Adaptation (15-19%), Reduction of Risk Potential (9-15%), Pharmacological and Parenteral Therapies (17-23%), and Management of Care (17-23%) (NCSBN, 2019).

Basic sciences such as anatomy, physiology and pathophysiology (Alameida et al., 2011; Daley et al., 2003; Landry et al., 2010; Sears et al., 2015) and general education courses, such as psychology and sociology were reported as predictors of NCLEX-RN success (Penprase & Harris, 2013; Sears et al., 2015). Pre-nursing science courses were significant predictors in Bentley's (2006) study but not in Breckenridge, Zobinson, and Roszowski's (2012) study. Concepts in oxygenation and circulation are significantly related to NCLEX-RN outcomes (Sears et al., 2015). Banks et al.'s (2018) claim that mental health is a predictor of NCLEX-RN success is a critical finding because majority of the international nursing curricula reported the lack of psychiatric nursing in their nursing programs.

Medical-surgical nursing is the most commonly identified nursing course that is significant in predicting NCLEX-RN success (Banks et al., 2018; Herrera & Blair, 2015; McCarthy et al., 2014; Schooley & Khun, 2014; Sears et al., 2015; Seldomridge & Di Bartolo, 2004; Simon & Augustus, 2009). The deficiency of psychiatric nursing in most global nursing curricula (Shaffer & to Dutka, 2012; Squires, 2017; Xu, 2010) can impact IEN NCLEX-RN performance since mental health is a predictor of NCLEX-RN success (Banks et al., 2018) and Psychosocial Integrity covers approximately nine percent of the exam (NCSBN, 2019). The relevance of medical-surgical nursing and psychiatric nursing as predictors of NCLEX-RN success is strongly supported by a literature review of 81 studies on NCLEX-RN indicators published from 1991 to 2017 that reported these two courses as the most significant predictors of NCLEX-RN success (Banks et al., 2018).

The predictive ability of nursing courses on NCLEX-RN performance of USEN is relevant in understanding the role of academic factors on the exam but the wide variation in global nursing curricula and the U.S. limits the generalizability of these findings. Contextual factors and methodological issues may also impact the validity and generalizability of the results. A major limitation on the predictive ability of a specific course on NCLEX-RN outcome can also be attributed to the wide variation in individual student, faculty member, and institutional characteristics.

Despite the presence of an extensive literature review, caution should be taken in generalizing the results of individual studies since review on the methodology of some of these studies revealed threats to internal and external validity. In two articles, Davis and Nichols (2002) and Xu (2010) reported secondary data as part of their findings when they

reported specific nursing courses that are deficient in the IEN nursing curricula. In most studies, the samples used one cohort of nursing students in an institution, which limits the generalizability of the findings to other institutions. Limited sample size was an issue in some quantitative studies. The small sample size ($n=7$) in the NCLEX-RN “fail” group in Emory’s (2013) study limits the conclusion on the predictive ability of pharmacology on NCLEX-RN outcome. Findings in Mathew et al.’s (2015) study that identified concepts that IEN find difficult and challenging were based on a small IEN sample size ($n=10$). Inadequate sample size reduces the power and effect size of the inferred relationships in any study (Polit & Beck, 2017).

McCarthy et al. (2014) argued that medical-surgical nursing and mental health nursing are predictive of NCLEX-RN success but failed to discuss the assumptions of multiple linear and logistic regression. Schooley and Kuhn (2013) concluded that course grades in pediatric, medical-surgical, and maternity nursing are significant indicators of NCLEX-RN performance, but the study was on ADN students. Penprase & Harris (2013) claimed that health assessment and psychology accounted for 22% of the variance in passing the NCLEX-RN. While this is statistically significant, 78% of the variance to pass the exam can be attributed to other factors that were not accounted for. Additionally, their population of study was accelerated second-degree students, which may limit the generalization of their findings to BSN students.

Investigating the association of nursing courses and NCLEX-RN outcome is paramount to understanding academic factors that affect NCLEX-RN outcomes. The state-of-the-science on nursing courses revealed an abundance of studies on this area on

USEN, but very limited in number and scope on IEN. Medical-surgical nursing emerged as the most significant predictor of NCLEX-RN success both from empirical and systematic reviews, followed by psychiatric nursing. This area is a significant gap in the IEN NCLEX literature. This research explored this area based on how the participants described their preparations for the NCLEX-RN. Hence, the results of the study can potentially identify academic factors that can facilitate or hinder IEN experiences when preparing for the NCLEX-RN.

Academic degree. Spetz et al. (2014) reported that 68% of IEN have bachelor's degree in nursing and more than 90% of PEN have bachelor's degree or higher. Previous education was claimed to be positively associated with passing the NCLEX-RN (Doggrell & Schaffer, 2016; Kaddoura et al., 2017) but some studies found a negative association (Amankwaa et al., 2015; Bosch, Doshier, & Gess-Newsome, 2012); Wambuguh et al., 2016).

There is a contradictory finding based on the available literature. Doggrell and Schaffer's (2016) systematic review of 19 studies published from 1994 to 2016 and Kaddoura et al.'s (2017) study separately reported that accelerated nursing students, who usually have previous baccalaureate degrees, have higher pass rates in the NCLEX-RN compared to traditional nursing students. This can be attributed to the acquisition of knowledge and skills that are needed to meet the demands of the nursing program. Accordingly, these students are slightly older than the traditional students whose developmental and maturational level may account for this variance. Contextual factors

such as work experience also provides explanation why accelerated nursing students may perform better academically.

Conversely, in a study on the influence of previous education on nursing licensure examination in Ghana, Amankwaa et al. (2015) reported no significant association between these two variables. Since the study was conducted among nursing students in Ghana, differences in nursing education and licensure examination may explain this variation. Wambuguh et al. (2016) had similar claim in a study of nursing students in California. A likely explanation of this discrepant result stems from the statistical analysis of the study. Using simultaneous logistic regression, all three models had a poor fit as evidenced by high chi-square values ($p < .05$) on the chi-square goodness-of-fit test. The authors acknowledged that the study was conducted at a time when the NCLEX-RN test plan was revised and updated. Historically, changes in the NCLEX-RN test plan and level of difficulty can have negative impact on pass rates (Quinn, et al. 2018).

Exploring the role of previous education is significant in the Philippine nursing population because second-degree nursing students, including licensed physicians, enroll and study nursing (Masselink & Lee, 2010; Ortiga, 2014). This unique phenomenon occurred when opportunities for U.S. migration opened for IEN. Furthermore, IEN may have acquired master's or doctoral degrees in nursing from their home countries prior to taking the NCLEX-RN. No studies were conducted to determine whether previous education on IEN has an influence on NCLEX-RN outcome. In this study, purposive sampling was used to identify participants with previous degrees in order to explore the influence of previous or advance nursing degree on IEN NCLEX-RN preparation.

Academic performance. There is a vast literature supporting the association between the academic performance of USEN and NCLEX-RN outcomes. There have been no studies to examine this association on IEN. Previous studies reported that nursing program GPA is significantly associated with NCLEX-RN success (Alameida et al., 2011; Daley et al., 2003; Giddens & Gloeckner, 2005; Haas et al., 2003; Kaddoura et al., 2017; Kidder, 2015; Quinn et al., 2018; Romeo, 2013; Sears et al., 2015; Tipton et al., 2008) and a strong predictor of NCLEX-RN passing (Banks et al., 2018; Bosch et al., 2012; Brodersen & Mills, 2014; Grossbach & Kuncel, 2011; Kaddoura et al., 2017; Landry, Davis, Alameida, Prive, Renwanz-Boyle, 2010; Romeo, 2013; Silvestri et al., 2013; Simon, McGinnis & Krauss, 2013; Uyehara et al., 2007). These studies validate previous findings reported in a review of 47 studies from 1981 to 1990 that cumulative GPA is the most reliable predictor of NCLEX-RN results (Campbell & Dickson, 1996). Moreover, the number of course grades of C and below were found to be associated with NCLEX-RN outcomes (Bentley, 2006; Kaddoura et al., 2017). Some studies further claimed that poor academic performance in the nursing program is associated with NCLEX-RN failure (Grossbach & Kuncel, 2011; Kidder, 2015; Sears et al., 2015). A few studies found no association between GPA and NCLEX-RN outcomes (Bentley, 2006; Henriques, 2002; Lyons, 2008; Stewart & Demsey, 2005).

The state-of-the-science shows that GPA is the strongest academic predictor of NCLEX-RN performance. Three systematic review of studies from 1981-1990 (Campbell & Dickson, 1996), 1984-2015 (Sears et al., 2015), and 1991-2017 (Banks et al., 2018)

support this claim. GPA does not only predict success, but also predicts failure in the NCLEX-RN. Only a few studies argued that GPA does not predict NCLEX-RN success.

While these studies provide relevant information about the importance of GPA as a statistically significant NCLEX-RN predictor, the generalizability of the findings is limited due to issues related to the research methods used in the studies. For instance, Alameida et al. (2011) used chi-square and logistic regression but did not describe the sample size in each pass/fail group and assumptions on the use of these statistics were not mentioned in the report. Chi-square and logistic regression require a minimum sample size in each cell, $n=5$ and $n=5-9$ per variable, respectively (Peduzzi, Concato, Kemper, Holford, & Feinstein, 1996; Polit, 2010). Romeo's (2013) study focused on the ADN population while Kaddoura et al. (2017) conducted the study on first-degree accelerated (FDA) and second-degree accelerated (SDA) BSN students. Differences in curriculum between the FDA and SDA students may have accounted for variations in GPA. The FDA had a 32-course general education and nursing curriculum that includes the 13-course nursing curriculum shared by the SDA students. These limit the generalizability of findings since the population of the proposed study will be BSN students with a government-prescribed standard BSN curriculum.

Furthermore, caution should be taken in interpreting Uyehara et al.'s (2007) results because GPA was found to be significantly associated with NCLEX-RN passing ($n=217$, $r=.186$, $p=.0059$) but it is not a predictor when combined with other variables, using logistic regression. Similarly, Kaddoura et al. (2017) reported that although GPA is

significantly associated with NCLEX-RN passing, it did not qualify as a significant predictor due to multicollinearity with other variables.

Although Bentley (2009) concluded that GPA is not significantly associated with NCLEX-RN outcome among traditional and accelerated nursing students, several observations warrant close attention that may have affected the internal validity of the study. First, there is low variability of GPA in the accelerated group. There was no significant difference ($p=.06$) in mean GPA between those who passed (GPA=3.17) and failed (GPA=2.62) the NCLEX-RN. Thus, GPA cannot predict NCLEX-RN outcomes. In contrast, the mean GPA of traditional students who passed (GPA=3.02) the NCLEX-RN was significantly higher ($p=.016$) than those who failed (GPA=2.73). When the two groups, accelerated and traditional students, were taken collectively, GPA did not show significant association with NCLEX-RN outcome. Second, it was noted that the Exit HESI exam, a standardized exam administered at the end of the nursing program to predict NCLEX-RN success, was the strongest predictor of NCLEX-RN outcome ($r = .419$; $p=.002$). This means that the Exit HESI exam is a more reliable predictor than GPA in determining NCLEX-RN outcome in this sample. This finding has critical implications on the grading and evaluation system of the institution since an external evaluation, the Exit HESI exam, became more accurate than the GPA in predicting NCLEX-RN results. Third, the dependent variable (DV) was categorical (NCLEX-RN pass/fail) but it was analyzed using linear regression, instead of logistic regression. Logistic regression is the appropriate statistics in determining the predictive ability of an independent variable on dichotomous outcomes, such as pass/fail (Polit, 2010). Fourth, one of the four sample

groups have a small sample size ($n=4$), which violates one of the assumptions of logistic regression. A sample size of five to nine is needed to meet the required events per variable in logistic regression (Peduzzi et al., 1996). Fifth, two regression models were made to explain the variation in NCLEX-RN result. Model 1 used GPA, Exit HESI exam, and number of Cs in nursing courses, which accounted for 10.9% of the variance in NCLEX-RN passing. Model 2 used GPA and number of Cs in nursing courses, which explained 6.8% of the variance. The inclusion of the Exit HESI exam accounted for only 4.1% increase in variance but the author concluded that Model 1 predicted 99.5% of students who would pass the NCLEX-RN but predicted only 9% of students who would fail. Even with a 10.9% variance, a significant 89.1% can be attributed to other factors in explaining variability in NCLEX-RN outcomes. These methodological issues on Bentley's (2009) study make the results inconclusive.

Moreover, sample size and population were limitations in Lyons' (2008) study. Through regression analysis, method of teaching and GPA are not associated with NCLEX-RN outcomes on ADN students. When grouped into traditional and problem-based teaching (PBL), there were small sample sizes on those who failed in the traditional teaching group ($n=4$) and PBL group ($n=2$). The small sample size can reduce the power and effect size of the inferred relationship and can affect the validity and generalizability of the study (Polit & Beck, 2017).

The influence of GPA is an understudied area in the literature of IEN NCLEX-RN research that needs to be explored. Valid and reliable assessment tools are needed to appropriately and accurately evaluate students' academic performance (Oermann, 2015;

Oermann & Gaberson, 2017) in order to detect its association on program outcomes, such as the NCLEX-RN. Nursing graduates' performance in the NCLEX-RN is a major criterion used in evaluating the quality of nursing programs (Taylor et al., 2014). Thus, there is a need for effective instruction and accurate measurement of students' academic performance.

Test-taking strategies. Students who experience difficulties with test-taking strategies is one of the reasons for NCLEX-RN failures (Griffiths, Papasrat, Czekanski, & Hagan, 2004; Mc Farquhar, 2014). Different test-taking styles have been reported to influence NCLEX-RN success. Sayles et al. (2003) and Sears et al.'s (2015) systematic review claimed that test-taking styles have predictive value on NCLEX-RN outcomes while Tipton et al. (2008) argued that no association exists between test-taking styles and NCLEX-RN success.

As nursing education, curriculum, and instruction vary worldwide, evaluation and measurement of nursing knowledge are also different. NCLEX-RN questions are application-level questions that evaluate a candidate's capacity to provide safe patient care as an entry-level nurse in a U.S health care setting (NCSBN, 2019). Variations in testing and tests that focus on knowledge-based questions, not on critical thinking and application, are factors affecting IEN performance in the NCLEX-RN (Bahari, 2017; Li et al., 2015; McGillis Hall et al., 2016). IEN are not familiar with the types of NCLEX-RN test questions and have claimed that multiple response items, prioritization, and delegation questions are challenging (Mathew et al., 2015; Quinn et al., 2018; Schipiour, 2016; Squires et al., 2016). The NCLEX-RN mostly uses multiple-choice questions that

require application and analysis level of thinking (Giddens, 2009; NCSBN, 2019). This type of test question is widely used in testing in U.S. nursing schools. IEN are more used to knowledge and comprehension level questions. Even non-native English speakers who are USEN reported difficulty with multiple choice-type questions (Bosher & Bowles, 2008) and did not know what to expect in the NCLEX-RN (Eddy & Epeneter, 2002). Competency in test taking that requires critical thinking is positively associated with NCLEX-RN success (Arathuzik & Aber, 1998) and interventions that focused on improving test-taking skills have been shown to increase NCLEX-RN pass rates (Cantu & Rogers, 2007).

Findings on test-taking strategies are relevant in providing understanding whether these influence test outcomes. Both quantitative and qualitative studies on this area reported an association between test-taking strategies and NCLEX-RN outcome, but there are limitations due to inconclusive evidence. Some results cannot be generalized due to the use of qualitative methodology (Mc Farquhar, 2014), limitation in sample size ($n=10$) for a quantitative study (Mathew et al., 2015), lack of empirical evidence (Bahari, 2015), population focus on ADN, and statistical analysis (Tipton et al, 2008). Tipton et al. (2008) concluded that type of test taker is not associated ($p=.192$) with NCLEX-RN success based on chi-square analysis. However, violation on minimum sample per cell ($n=5$) was violated with two cells having $n=0$ and $n=4$.

Differences in curriculum, instruction, and testing produce variations in competencies related to test-taking strategies. IEN who were trained in a different educational system may not be familiar with the holistic and conceptual approach of the

NCLEX-RN, therefore, IEN may not develop the test-taking skills necessary to pass the NCLEX-RN. This area has not been explored on IEN. An exploration of IEN experiences in nursing school to determine testing practices and test-taking skills can help identify academic factors that may influence their NCLEX-RN outcomes.

Learning styles. Individual differences account for variations in learning styles. Each individual has different preferences for particular learning modalities; some are visual learners, some are auditory learners, some may learn more effectively in groups than in isolation (Davis, Sumara & Luce-Kapler, 2015). A few studies on the association of learning styles and NCLEX-RN outcomes yielded opposite results. Lockie et al. (2013) claimed that learning styles influence NCLEX-RN passing but according to Lown and Hawkins (2017), individual learning styles are not related to NCLEX-RN success. Mc Farquhar (2014) and Eddy and Epeneter (2002) reported that some USEN identified classroom experiences such as incongruity, lack of time for learning, lack of focus on NCLEX-RN preparation as unhelpful on their learning. Because of these negative learning experiences, they were reportedly surprised at the level of the difficulty and obscurity of the NCLEX-RN questions. Nevertheless, the qualitative nature of these studies limits the generalization of their findings.

Lockie et al.'s (2013) conclusion is relevant in understanding the role of learning styles on NCLEX-RN outcome but it has limitations. First, purposive sampling on one class of 197 students, which is a non-probability type of sampling, may reduce the representativeness of the sample (Polit & Beck, 2017). Second, the underrepresentation of males (6.5%) in the sample may have accounted for variation in learning styles. Third,

the Learning Style Inventory (LSI) that was used to measure learning styles is a 12-item questionnaire with four subscales. However, reports on the reliability coefficient of the LSI (Cronbach's alpha .73 to .81) were for the entire questionnaire and not for each subscale. This constitutes a violation in dimensionality in instrumentation (DeVellis, 2017; Waltz et al., 2017). As a result of these observations, caution should be taken in interpreting the results.

Lown and Hawkins (2017) argued that learning styles and NCLEX-RN outcomes are not associated. The conclusion has some methodological limitations. First, the sample was homogenous. Variations in demographic characteristics would have resulted in a different statistical outcome. Second, convenience sampling reduced the representativeness of the sample (Polit & Beck, 2017). Third, more than half of the records used for secondary data analysis did not meet the inclusion criteria. Fourth, learning styles were determined through self-reports using the Assessment Technologies Institute (ATI) Self-Assessment Inventory (SAI), which is a 195 multiple-choice instrument that included 45 questions on learning styles. One of the weaknesses of self-reports is accuracy and validity of information because this is dependent on the willingness of the individual to provide personal information (Polit & Beck, 2017). Fifth, there was no information to describe the psychometric properties of ATI SAI, which is useful in establishing reliability of the instrument. Thus, these observations may have affected the validity of the results.

These limited studies on learning styles were conducted exclusively on USEN. Through this study, an exploration of the participants' learning style provided understanding on its role on IEN NCLEX-RN preparation and outcome.

Unfamiliarity with the NCLEX-RN. Several studies reported that IEN found difficulty adapting to the NCLEX-RN because they are not familiar with the NCLEX-RN test plan and computer-based testing (Aiken, 2007; Mathew et al., 2015; McGillis Hall et al., 2016; Petrovic et al., 2019; Salfi & Carbol, 2017). International nursing education is not based on the NCLEX-RN therefore, international nursing programs do not use the NCLEX-RN blueprint for their nursing curricula. Familiarization with the NCLEX-RN usually occurs after graduation from nursing school when the IEN develops interest or has opportunities for U.S. nursing employment. However, some nursing schools may introduce NCLEX-RN in the form of a seminar. This lack of familiarization may have produced negative NCLEX-RN outcomes for IEN.

IEN are taught and tested differently in their respective nursing programs, which may also explain their unfamiliarity with the NCLEX-RN (Bahari, 2015; Benton, 2017; Factor et al., 2017; Xiao et al., 2014). Bahari (2015) claimed that Saudi nursing education does not focus on critical thinking questions. Hou et al. (2019) documented the differences in nursing licensure examination between China and the U.S. In the Chinese licensure exam, definition of technical terms and case studies are asked in multiple choice format.

Moreover, in the Philippines, the licensure exam is as a paper-and-pencil test that is administered in two days. The use of computerized testing in international nursing

education is not well documented in the literature. The NCLEX-RN is a computerized test and when students are not given opportunities on the use of computers while they were in the nursing program, this gap in technological use in nursing education may also explain variations in NCLEX-RN experiences and outcomes.

While some studies on IEN's unfamiliarity on the NCLEX-RN exist, the generalizability of the findings has limitations. Mathew et al. (2015) reported on a quantitative study that IEN are not familiar with the NCLEX-RN structure and test questions based on a very limited sample size (n=10) of IEN. Limited sample size (n=4) was also a limitation in the qualitative study of Peisachovich (2015) that raises issues on data saturation and thick data. McGillis Hall et al. (2016) study had adequate sample size (n=202) but these are exclusively Canadian nursing students. Salfi and Carbol's (2017) claim was based on a review of two studies comparing U.S. and Canadian nursing practice. A literature review on differences in nurse licensure exams was conducted but it focused on China (Hou et al., 2019). There is no current literature on the extent of unfamiliarity of IEN on the NCLEX-RN exam though it can be inferred that this exists based on differences in nursing education and licensure exam. This study explored this area to determine if familiarity with the NCLEX-RN influenced IEN test outcomes.

Time to study. The length of study time while a student is in nursing school and after graduation has resulted to varying NCLEX-RN outcomes. Previous studies claimed that some IEN and USEN had limited time to study for the NCLEX-RN (Carr, 2011; Choe & Yang, 2009; Eddy & Epeneter, 2002; Woo et al., 2009). It takes as much as four to six months of studying before taking the NCLEX-RN. This increases the time lag

between graduation and taking the exam, which reduces the probability of passing the test (Davis & Nichols, 2002; Woo et al., 2009). This is consistent with most studies that claim graduates who take the NCLEX-RN sooner have higher probability of passing the NCLEX-RN. On the other hand, longer hours of studying basic content (Beeman & Waterhouse, 2003), designing a strategic plan to study (Davenport, 2007), and having a regular study session during the senior year (Seldomridge & Di Bartolo, 2004) were associated with higher chances of NCLEX-RN passing.

Since IEN do not have a sense of urgency to take the NCLEX-RN, preparation to study for the examination does not usually take priority unless the person is actively considering applying for the exam or there is an available job opportunity to work in the U.S. Thus, it may take several years before an IEN will start studying for the NCLEX-RN. This unique context of IEN may be a factor influencing their NCLEX-RN outcomes.

In general, the state-of-the-science on academic factors influencing outcomes is abundant on USEN but very limited on IEN. Most studies on IEN identified that the differences in nursing education and curriculum may account for variations in NCLEX-RN outcomes. Issues on test-taking strategies, unfamiliarity with the NCLEX-RN, and lack of time to study for the NCLEX-RN were reported in few IEN studies.

Several academic factors have been investigated and while findings from these studies had variations over time, academic performance (GPA) emerged as the most significant predictor for NCLEX-RN success on USEN students. Medical-surgical nursing and psychiatric nursing are two strong predictors of NCLEX-RN success. The lack of psychiatric nursing in most global curricula may have an impact on NCLEX-RN

outcomes on IEN and is a programmatic concern that needs to be addressed. The influence of previous and advanced nursing degree, as well as learning styles, on NCLEX-RN has not been investigated in the IEN population. These constitute a major gap on IEN studies that needs to be examined. The study aimed explore the presence and influence of these academic factors on IEN NCLEX-RN outcomes.

Despite the relevance of these findings in understanding the influence of academic factors on NCLEX-RN success, the impact of unexamined academic factors should not be ignored. Extraneous variables such as the competence of faculty, individual student characteristics, availability of student resources, length of nursing program, pre-nursing prerequisite courses, and quality of the institution must be considered in analyzing the overall impact of academic factors on NCLEX-RN outcomes.

Environmental Factors

Environmental factors that may influence NCLEX-RN outcomes that have been investigated in the literature have ranged from socio-economic status, family responsibilities, support system, time lag between graduation, and initial nursing licensure.

Socio-economic status. This has not been studied extensively in the literature for both IEN and USEN. It was reported in one U.S. study as a predictor of NCLEX-RN outcome (Breckenridge et al., 2013), which was a surprise to the authors. Poverty had the largest odds ratio (OR = 13.3) using several logistic regression models, controlling 12 other variables. In this study, income was not a proxy for minority status. The incidence of poverty in the sample is 60% among Whites and 64% on all race/ethnic backgrounds.

This may reflect an overrepresentation of poverty in the sample, thus, accounting for the statistical outcome. Dewitty et al. (2016) argued that 33% of their sample reported financial issue as a concern that might impact their academic success. In addition, financial difficulty was cited as one reason that nursing graduates had to wait for four to six months prior to taking the NCLEX-RN, which increases the time lag between graduation and taking the exam (Carr, 2011), and reduces the chances of passing the NCLEX-RN (Davis & Nichols, 2002; Woo et al., 2009).

In a five-country study among nursing students in Europe, 26% to 65% of the sample reported experiencing economic difficulties (Dante et al., 2016). Its association with academic success was not measured. Nonetheless, this provides insight on the limited literature on IEN education and contextual backgrounds. No other recent studies in USEN and IEN explored the influence of socioeconomic status on NCLEX-RN outcomes.

In a study on nursing students in the Philippines, Oducado and Penuela (2014) reported that 61.7% of their sample came from low-income families. Most nursing schools in the country are privately-owned, thus, financial issues greatly impact a student's academic experience. Though this didn't measure the relationship between family income and NCLEX-RN, it provides an insight on the economic background of nursing students in the country.

The socio-economic status of IEN is a unique situation when understanding their motivation and purpose in studying nursing and preparing for the NCLEX-RN. Aspirations for international migration and social mobility for the family are strong

motivations for PEN to study nursing (Masselink & Lee, 2010; Ortega, 2018). The cost of nursing education in the Philippines makes nursing one of the most expensive college courses in the country. Post-graduation, attendance at review classes and application fees to meet national and international licensure requirements can be expensive for IEN (Choe & Yang, 2009).

The unique context of IEN socio-economic status is critical in understanding motivations to study nursing and pass international licensure exams, such as the NCLEX-RN. The dearth of literature on the influence of socio-economic status on NCLEX-RN outcomes warrants the need to explore this area. This research shed light on this IEN contextual background.

Family responsibilities. In U.S. studies, family demands and life events have negative correlation with NCLEX-RN outcome (Silvestri et al., 2013) and students with childcare have lesser chances of passing the NCLEX-RN (Spetz & Seago, 2005). These findings corroborated results from studies on Korean and Mexican nurses. They identified socio-economic and cultural factors related to work, financial, family responsibilities, and caring for parents and siblings as hindrances in their preparation for the NCLEX-RN (Choe & Yang, 2009; Squires, 2017). Similarly, Filipinos are known for their close-knit family ties and financial obligations to their families after they finish college. In the European study by Dante et al. (2016), 23% to 30% of nursing students reported the presence of family commitments that may have affected their academic success.

There is a consistent finding from few studies about the influence of family responsibilities on NCLEX-RN outcomes. Only two qualitative IEN studies were conducted on this area, one in Korea (Choe & Yang, 2009) and Mexico (Squires, 2017). Both studies reported that work-life balance interfere with educational advancement, career development, and preparation for the NCLEX-RN. Seago and Spetz (2005) highlighted the lower NCLEX-RN pass rates of Filipino nursing students in the California community college system. A striking similarity in these studies is culture. Koreans, Mexicans, and Filipinos consider caring and providing for family members as an important individual, family, and cultural responsibility. For Filipinos and Koreans, paternalism and communitarianism are embedded in Eastern cultures that are highly regarded as contributory to achieving self-realization, finding peace, and meeting a quality of life (Rich, 2007; Ross, Sawatphanit, & Suwansujarid, 2007). There were no other studies found that explored this context on other IEN.

Silvestri et al. (2013) concluded using logistic regression that home and family events and responsibilities were significant in affecting NCLEX-RN outcomes (OR = .994, 95% CI [.989, 1.00]). A limitation of the study is the psychometric properties of one of the instruments used to measure home and family events and responsibilities. The Recent Life Changes Questionnaire consisted of 74 life events that have values (life change units) that related to five subscales: health, work, home and family, personal and social, and financial. No reliability coefficients were reported to establish the reliability of the measurement tool.

One distinct contextual characteristic of IEN before they take the NCLEX-RN is the initial nursing licensure and/or work experience in their home countries. This provides opportunity to work and provide for the financial needs of their families. These competing demands influence their preparations to study for the NCLEX-RN, as reported in only two IEN studies from Korea and Mexico. With very limited studies on the area, an exploration of other IEN experiences provides a deeper understanding of the role of family responsibilities on NCLEX-RN outcomes.

Support System. Both the presence and absence of social support may affect IEN preparation for the NCLEX-RN. The presence of social support while studying for the Canadian licensure exam resulted in increased odds of passing the NCLEX-RN (OR=2.373, 95% CI [1.929, 2.918]) (Covell et al., 2017). Support from peers and other forms of personal networks were seen to be instrumental in passing the NCLEX-RN among Mexican American nursing students (Anders, Edmonds, Monreal, & Galvan, 2007). Conversely, lack of social support for Korean IEN and pressure from one's support system for the Chinese IEN have negative influence on their NCLEX-RN preparation (Choe & Yang, 2009; Li et al., 2015). Similarly, Kasprovich & VandeVusse (2018) stated that the presence of nursing classmates on social media can be a source of social support and peer pressure, at the same time, especially when those who passed start to post their status on social media.

Although there are conflicting claims on the association between the presence of support system and NCLEX-RN outcome, Covell et al.'s (2017) finding on the positive association between social support and NCLEX-RN performance of a study of 2,280 IEN

in Canada suggests a very significant result. Participants in this study were IEN from China, Japan, Korea, and the Philippines. Participants from other countries that were not specified in the report were mentioned as South Asians, Arabs, Latin Americans, Whites, and Blacks. The large sample size, diversity, and educational attainment of the sample, which included master's and doctoral graduates, provided wide variability to warrant enough power and effect size on the inferred relationships of the research variables. However, measurement and sampling bias resulted to limitation of the study. The psychometric properties of the 60-item questionnaire that the authors developed were not reported, although content validity, test-retest reliability, cognitive interviewing, translation processes, and pilot testing were conducted. The authors recognized a potential sampling bias and difficulty to determine the extent of measurement error.

In another study, Li et al. (2015) claimed that the opinion of others cause anxiety among Chinese nursing students, which may have affected their NCLEX-RN outcome. Although the study had a large sample (n=1,527), the findings have limitation based on the lack of discussion on the factor analysis. Furthermore, Choe and Yang's (2009) argument that the lack of support system has negative influence on Korean nurses' NCLEX-RN preparation, was based on their qualitative data that limits the generalizability of their findings.

Time Lag. The time lag between graduation from nursing school and taking the NCLEX-RN accounts for various factors that may affect the IEN preparation and readiness for the NCLEX-RN (Davis & Nichols, 2002; Woo et al., 2009). Chances of

passing the NCLEX-RN decrease as the time lag increases ($p<.0001$) and the number of test attempts increase ($p<.0001$) (Woo et al., 2009).

Time lag is relevant to IEN since there is no immediate need for them to take the NCLEX-RN after they graduate unless immigration and employment in the U.S are imminent. This lack of immediacy explains the time lag experienced by IEN before taking the NCLEX-RN and it may take several years after completing a nursing degree before an IEN decides to take the NCLEX-RN.

The current science on environmental factors that may influence NCLEX-RN outcomes point to family responsibilities, social support, and time lag as factors that may exert influence on IEN NCLEX-RN performance. These are factors that were studied on a large sample of IEN but caution should be taken due to the identified limitations. Further exploration is needed to develop more insight on the role of the IEN environment in influencing their NCLEX-RN experiences.

Professional Integrating Factors

Previous studies that examined professional integration factors and their influence on NCLEX-RN outcomes include remediation and tutoring, institutional characteristics, and enrollment in school-based review programs and commercial review centers.

Remediation and tutoring. Remediation and tutoring are two strategies that are used as an early intervention to students who are identified at-risk of failing a nursing course (Oermann & Gaberson, 2017). Studies on the influence of remediation and tutoring on NCLEX-RN outcomes showed varying results. Seago and Spetz (2005) reported that students who underwent remediation and tutoring were found to have lesser

chances of passing the NCLEX-RN. This may be due to the need for remediation and tutoring since students who avail of these services are usually those who struggle academically. As such, certain academic and individual factors can be accounted for a student's need for these academic services. These services are more common to the ADN population in the study because they have higher attrition and completion rates compared to BSN students. The diverse student population in California may be a factor since minority nursing students usually experience academic difficulties, thus an increased use of academic support services and increased risk for NCLEX-RN failures (Seago & Spetz; 2005). These factors are limitations in the generalizability of this study.

However, more studies showed that regular and structured faculty-student mentoring is associated with higher retention rates and NCLEX-RN pass rates (Edwards et al., 2009; Lauer & Yoho, 2013; Williams et al., 2017; Wilson, Sanner, & McAllister, 2010). Early identification of at-risk students and provision of regular and structured remediation measures can help students succeed in the nursing program. Advising and mentoring are essential academic support services that are beneficial to students. While the findings of these studies are relevant to nursing students, they have certain methodological weaknesses. The limited generalizability of their findings can be attributed to the population of their study, indigenous nursing students in New Zealand, who may have differences in student characteristics and educational practices (Wilson et al., 2011) and use of qualitative method (Wilson et al, 2010). Although Lauer and Yoho (2013) reported the benefits of remediation on improving HESI test scores on USEN, the

limitation is on the dependent variable, which was HESI test score and not NCLEX-RN outcome.

There are no studies that investigated remediation and tutoring on IEN. This is a gap in the literature that can be potentially explored in future studies.

Institutional factors. A few studies reported the impact of institutional factors such as student population, accreditation, facilities, and ownership on nursing licensure outcomes. In the U.S., institutions with large student populations had high NCLEX-RN pass rate (Crow et al., 2004). This is similar to Bautista et al.'s study (2018) that reported Philippine educational institutions with large populations had higher pass rates in the Philippine NLE (PNLE) than those with medium or small-sized populations. In the same study, graduates of state-owned institutions had higher pass rates on the PNLE than those who graduated in private institutions. Accreditation status is known to contribute to a better quality of nursing education and higher nursing licensure pass rates (Bautista et al., 2018; Ko & Yu, 2019; Rosales et al., 2018).

Squires (2017) identified deficiencies in faculty requirements and lack of clinical experience and rotation as institutional factors that accounted for the low performance of Mexican nurses in the NCLEX-RN. Marcus et al. (2014) argued that lack of quantity and quality of nursing faculty in the Philippines as an effect of international migration of experienced nursing faculty is an institutional factor that negatively affects nursing licensure outcomes. To support these claims of faculty factors, studies from India, Mexico, Nigeria, and the Philippines report the lack of quantity and quality of faculty members and clinical sites as factors that affect the quality of nursing education (Makata

et al., 2016; Masselink & Lee, 2010; Nair & Rajan, 2017; Xu, 2010). The lack of available faculty members for instruction, advising, and monitoring can be a deterrent because adequate faculty support is associated with NCLEX-RN pass rates (Williams et al., 2017; Wilson et al., 2010; Edwards et al., 2009).

The availability of studies that examined IEN institutional factors on academic outcomes is relevant in understanding their educational experiences. However, four of the IEN studies lack generalizability due to the use of qualitative method (Masselink & Lee, 2010; Wilson et al., 2010) and narrative reports (Makata et al., 2016; Nair & Rajan, 2017; Xu, 2010) and different population (Wilson et al., 2010). Two Philippine studies were quantitative, but measured the PNLE as the dependent variable, not the NCLEX-RN. The findings on Crow et al.'s (2004) national study on institutional factors' impact on NCLEX-RN outcomes may have limited applicability to the IEN population due to differences in educational practices internationally. Thus, there's a gap in the literature on this area.

School-based review programs. Structured NCLEX-RN review programs are offered during the senior year in nursing schools in the U.S. (Cox-Davenport & Phelan, 2015; Phelan, n.d.) These programs are offered as computerized standardized assessment review programs and/or as an end-of-program live review administered by a commercial third-party review program. Results of a national study revealed that commercial review was a common intervention done by nursing schools that was significantly associated with NCLEX-RN outcomes (Crow et al., 2004).

At present ATI, HESI, and Hurst are the most commonly used commercial reviews. NLN and Mosby Assess tests are also used to a lesser degree. Most studies investigated the statistically significant predictive ability of ATI (Alameida et al., 2011; Brodersen & Mills, 2014; Brussow & Dunham, 2018; Chen & Bennett, 2016; Emory, 2013; McCarthy et al., 2014; Penprase & Harris, 2013; Phelan, n.d.; Shoemaker et al., 2017; Ukpabi, 2008; Yeom, 2013), HESI (Bentley, 2006; Brodersen & Mills, 2014; Frith, Swell, & Clark, 2008; Kaddoura et al., 2017; Lauer & Yoho, 2013; Nibert & Morrison, 2013; Parrone, Sredl, Miller, Philips, & Donaubauer, 2008; Phelan, n.d.; Robert, 2018; Schooley & Kuhn, 2013; Shoemaker et al., 2017; Zweighaft, 2013), and NLN standardized tests (Simon & Augustus, 2009; Simon et al., 2013; Ukpabi, 2008). Schools have used exit predictive exams, such as the ATI RN Comprehensive Predictor, because it has strong construct validity with the indicators of an entry-level nurse (Liu & Mills, 2017) and it was found to be more effective than HESI (Shoemaker et al., 2017).

On the other hand, Nibert & Morrison (2013) argued that HESI has 96.4% to 99.2% accuracy in predicting NCLEX-RN success. To support this claim, a national study concluded that HESI is a better predictor than ATI (Phelan, n.d.). A major limitation on Nibert & Morrison's (2013) study, however, is their business association with HESI, which is a significant source of bias. Another limitation in some of these studies is their use on ADN and accelerated BSN students.

A part of school-based NCLEX-RN review programs is letting students answer a pool of review questions for weekly adaptive quizzes and achieving a benchmark score. There is a positive correlation between achievement of benchmark scores and the number

of questions answered, the number of quizzes taken, and the number of log-ins to take the practice questions (Cox-Davenport & Phelan, 2015). The researchers reported students who passed the NCLEX-RN answered an average of 1,282 questions while those who failed answered 2,019 questions ($p<.01$). This shows that students do not necessarily have to answer more questions to increase their probability of passing the NCLEX-RN. Students must look into their percentage of passing score when they take the practice tests.

There is only one quantitative study that measured the association of HESI exit exam to predict NCLEX-RN success on IEN (Parrone et al., 2008). In their study of 67 IEN, HESI predicted 37% on first-time examinees and 100% on both first-time and second-time examinees. Although these studies are relevant in identifying students who will most likely to pass and those who are at-risk of failing the NCLEX-RN, a major limitation of these standardized tests is their ability to predict NCLEX-RN failures (Hunsicker & Chitwood, 2018; Yeom, 2013). Similarly, only one IEN qualitative study, conducted in South Korea, identified the positive influence of having one to two years of university-based NCLEX-RN review program on NCLEX-RN outcome (Choe & Yang, 2009). However, the qualitative nature of the study limits its generalizability to other IEN.

In spite of the large number of PEN taking the NCLEX-RN, Philippine nursing schools, unlike Korea, do not generally offer NCLEX-RN review programs. Masselink and Lee (2010) described the commercialization of nursing in the Philippines wherein nursing schools took control over the licensure preparation of their nursing students. This

was done either by establishing their own review centers or by partnering with commercial review centers. An estimated 90% of nursing schools in the Philippines have affiliation with commercial review centers (Masselink & Lee, 2010). However, most of these school-based review centers prepare students for the Philippine nurse licensure exam. Only a few school-based review centers provide NCLEX-RN review programs.

While no research has been conducted on this area, this was relevant to the population in this study, considering the number of PEN taking the NCLEX-RN and the nursing schools in the Philippines. This is a gap in the literature of IEN NCLEX-RN studies that was initially explored in this study.

Commercial review centers. Since international nursing schools do not usually offer NCLEX-RN review programs, commercial and very few university-based review classes for NCLEX-RN are available internationally (Brush, 2008; Choe & Yang, 2009; Masselink & Lee, 2010; Ortega, 2014). These review classes orient IEN to U.S. nursing practice and the NCLEX-RN test plan (Beriones, 2014). South Korea, India, and the Philippines, the top three suppliers of IEN in the U.S., have commercial review centers available for their nursing graduates.

The Philippines has an abundance of these commercial review centers that offer an average of two to three months of NCLEX-RN review. Participation in these centers is one of the most commonly used approaches PEN use to prepare for the NCLEX-RN. However, most of the review faculty are either nurses who do not have any experience in U.S. nursing education and/or nursing practice or new registered nurses who had outstanding academic achievement. Thus, these commercial review centers provide

review programs that are purely theoretical and not experiential. There are no studies known to document the impact of these review centers on NCLEX-RN outcomes on PEN. This can be a promising research area to investigate.

Currently, there is abundance of studies on USEN investigating the use of commercial standardized computerized exams on NCLEX-RN outcomes. The few available studies on IEN's NCLEX-RN review preparation were studies conducted on IEN from Korea, Mexico, and the Philippines. The qualitative nature of these studies is a limitation on the generalizability of their findings. Despite the vast number of NCLEX-RN examinees, nursing schools, and commercial nursing review centers in the Philippines, their association with NCLEX-RN outcomes has not been empirically investigated. This research study explored this area.

Outside Surrounding Factors

National licensure examinations, CGFNS CE, bridging programs, regulatory bodies, and the testing environment, are outside surrounding factors identified in the literature that may influence NCLEX-RN outcomes.

National licensure examination (NLE). Various countries have different nursing regulations for entry into practice nursing. Brazil, for instance, does not have an NLE (da Silva & Cabral, 2018). Saudi Arabia recently started their NLE in 2017 (W.L. Dator, personal communication, March 12, 2017). Canada, China, Ghana, South Korea, India, and the Philippines, require their nursing graduates to pass a NLE prior to practicing nursing (Amankwaa et al., 2015; Choe & Yang 2009; Hou et al., 2019; Ko & Yu, 2019; Nair & Rajan, 2017; Rosales et al., 2014; Shaffer & To Dutka, 2012; Xiao et al., 2014).

The absence of professional regulation and measurement of graduates' entry-level nursing competency to enter nursing practice, through licensure examinations, may be a barrier to achieving successful IEN NCLEX-RN outcomes. These regulatory practices are perceived as mechanisms to establish equivalence nursing education and practice, in the absence of an internationally accepted standard.

The blueprints of international NLE are different from the NCLEX-RN. The NCLEX-RN uses the categories of client needs as the framework of the examination, which is an integrated approach across clinical specialties across the life span. Most international NLE use the traditional medical model across clinical specialties (Rosales et al., 2014; Xiao et al., 2014). Some studies on international NLE documented the relationship between nursing courses and country-specific NLE outcomes. For instance, in China, theoretical courses such as medical-surgical nursing, community health care, and computer basics explained 36% of the variance while clinical internships in surgery, obstetrics & gynecology, and pediatrics accounted for 28.1% of the variance in their NLE (Xiao et al., 2014). Both fundamental and advanced nursing courses were predictive of NLE success in the Chinese NLE (Xiao et al., 2014). The Chinese NLE has a different format compared to the NCLEX-RN. Although they are asked in multiple choice questions, they focus on definition of technical terms and clinical case studies (Hou et al., 2019).

In comparison with U.S. nursing courses' association with the NCLEX-RN, it is relevant to mention that medical-surgical nursing is a course that predicts success in the Chinese NLE (Xiao et al., 2014). While the literature identified medical-surgical nursing

and psychiatric nursing as the nursing courses that are most predictive of NCLEX-RN success, these are the two courses that were considered as the most challenging by PEN in the Philippine NLE (De Leon, 2016). No IEN studies were ever conducted to investigate any association between nursing courses, NLE, and NCLEX-RN outcomes. By exploring the experiences of IEN while preparing for the NCLEX-RN, this study has started to uncover this phenomenon.

CGFNS Certification Examination. In the absence of global standards of nursing education, the Commission on Graduates of Foreign Nursing Schools Certification Examination (CGFNS-CE) was administered to evaluate the nursing educational requirements, competencies, and eligibility of IEN for U.S. nursing licensure. Those who passed the CGFNS CE had an 86 percent NCLEX-RN FTPR while those who did not earn the CGFNS CE had 43 percent. Thus, the CGFNS-CE served as a predictor of NCLEX-RN success (Davis & Nichols, 2002). However, almost all states and territories have adopted credentials evaluation and replaced the CGFNS-CE as a requirement for taking the NCLEX-RN. Currently almost all states eliminated the CGFNS-CE as a requirement for IEN to take the NCLEX-RN. CGFNS-CE review programs are offered in several review centers internationally. The CGFNS-CE is an established predictor of NCLEX-RN outcome (Davis & Nichols, 2002). However, it lost its relevance when state boards of nursing opted to remove it as part of the application requirements for IEN NCLEX-RN licensure.

Bridging programs. A bridging program is a curriculum that is offered to assist IEN integrate into the workforce by providing courses that will update their professional

competence to meet practice standards, familiarize with occupation-specific language and terminologies, and prepare them for the licensure examination (Covell et al., 2017). The U.S. does not have a bridging program to prepare IEN for the NCLEX-RN while the U.K., Australia, and Canada have structured bridging programs that help prepare IEN for their respective licensure and workforce integration.

Covell et al. (2017) reported that while bridging programs are influential for IEN with significant educational needs, it is not significantly associated with IEN who took the old Canadian nursing licensure examination. Canada adapted the NCLEX-RN in 2015. However, it is interesting to note that IEN have higher FTPR on the Canadian NCLEX-RN compared to IEN of the same country who took the U.S. NCLEX-RN (Montegricon, 2020; NCSBN, 2019). An investigation on the impact of bridging programs may provide understanding on its role on IEN on the new Canadian NCLEX-RN outcomes.

Regulatory bodies. Previous studies reported variations in nursing regulation among countries. The proliferation of substandard nursing schools due to loose regulation of accrediting and regulatory bodies is systemic factor that was reported as a cause of the deteriorating quality of nursing education in the Philippines (Bautista et al., 2018; Marcus et al., 2014; Masselink & Lee, 2010; McGillis Hall et al., 2015; Ortega, 2014; Rosales et al., 2014). The national education policy in Nigeria does not include nursing education, which is inhibiting the advancement of nursing as a profession vis-à-vis international standards (Makata et al., 2016). Some countries, like Brazil (da Silva & Cabral, 2018), do not have nursing licensure examinations (NLE) to regulate the entry of

its graduates into nursing practice (Aiken, 2007; Shaffer & To Dutka, 2012). China (Li et al., 2015), Ghana (Amankwaa, et al., 2015), Korea (Ko & Yu, 2019), Philippines (Bautista et al., 2018; Rosales et al., 2014), and Canada (Petrovic et al., 2019; Salfi & Carbol, 2017) have NLE. Recently, Saudi Arabia implemented NLE (W.L. Dator, personal communication, March 12, 2017).

Identifying the nursing regulatory practices in other countries helped inform this study on the presence of established laws and policies that regulate nursing practice in various countries. This helped in determining measures that are in place to help ensure quality and safe nursing practice against national and international standards. It provided valuable insight on international regulatory practices.

Testing environment. The condition of the testing environment may have an impact during testing and on test outcomes (Oermann & Gaberson, 2017). NCLEX-RN testing centers are available internationally in the Philippines, the U.K., Canada, and Australia (NCSBN, 2020). Geographical and environmental conditions can be distracting and may interfere with a test-taker's performance (Oermann & Gaberson, 2017). For instance, Canadian nurses expressed concerns about noise and distractions in their testing environments while taking the NCLEX-RN (McGillis Hall et al., 2016).

These environmental factors can constitute construct-irrelevant variance (Waltz et al., 2017) that may affect the NCLEX-RN outcome (Eddy & Epeneter, 2002; McGillis Hall et al., 2016). The results based on the two studies limit generalization based on the qualitative method used in the studies. More studies on the influence of test environment on NCLEX-RN outcomes are thus needed to support transferability of these findings.

Summary

The literature shows that majority of previous studies have investigated various factors that are associated with NCLEX-RN outcomes on USEN. These factors range from individual demographic characteristics and academic factors to environmental and regulatory factors. There is very limited amount and scope of research conducted on these factors on IEN. Specifically, there are no published studies on NCLEX-RN experiences and factors affecting outcomes among PEN.

The state-of-the-science consistently identified language, as the most common individual factor influencing IEN NCLEX-RN outcomes. English as a second language is a predictor of NCLEX-RN success on IEN. Differences in nursing practice and employment in healthcare were also investigated and reported to have negative influences on NCLEX-RN outcomes. Studies on the influence of demographic characteristics such as age, gender, and race/ethnicity, and previous healthcare experience yielded inconclusive results. The unique contextual background of IEN work experience and its influence on NCLEX-RN outcome is a significant area to explore.

Very few qualitative studies explored the negative influences of various affective factors such as stress, anxiety, and lack of confidence on IEN NCLEX-RN outcomes. There is a need for quantitative studies to better understand the impact of stress and anxiety on IEN NCLEX-RN outcomes. Critical thinking emerged as the most significant predictor of NCLEX-RN success on USEN. However, this has not been studied on the IEN population.

The current literature identified differences in nursing education and curriculum as the most common academic factors influencing IEN NCLEX-RN outcomes. Poor test-taking strategies, unfamiliarity with the NCLEX-RN, and lack of time to study were also reported. Academic performance, measured as GPA, emerged as the academic factor that has the strongest predictive ability on NCLEX-RN outcomes on USEN but there were no studies that investigated this relationship on IEN. Medical-surgical nursing is the strongest predictor of NCLEX-RN outcome, followed by psychiatric nursing. The absence of psychiatric nursing in most global nursing curricula may account for one of the reasons for academic variations on IEN NCLEX-RN outcomes. The association of previous education and advanced degree was reported to impact NCLEX-RN outcomes but this relationship was not examined in the IEN population.

Family responsibilities, presence and absence of support system, and time lag were identified as important environmental factors influencing IEN NCLEX-RN. The influence of school-based and commercial review programs, and NLE on NCLEX-RN outcomes has not been investigated on IEN. The CGFNS CE is a significant predictor of IEN NCLEX-RN outcomes but it has lost its relevance on current regulatory requirements. A reevaluation of the impact of bridging programs is needed.

Although the factors that were investigated are relevant in understanding how they influence IEN NCLEX-RN outcomes, there is lack of rigor in some of these studies, which limits the generalizability of their findings. The lack of rigor can be attributed to the use of a particular research design, such as the limited generalizability of qualitative research. Most of the studies were conducted on nursing students, thus, the population,

selection bias, sampling size, and non-probability sampling techniques may limit the external validity of the findings. Several studies have reliability issues related to instrument measurement. This includes lack or inappropriate use of reliability coefficient, and lack of explanation of translation processes. Some statistical analysis yielded inaccurate results due to violations of assumptions and wrong interpretation of the *p* value.

The absence or lack of investigation of factors such as critical thinking, GPA, nursing courses, NLE, work experience, and review programs and the inconclusive findings on the influence of demographic variables, stress, anxiety, learning and testing styles, and familiarity on NCLEX-RN warrant the need for a dedicated research program to investigate their association on IEN NCLEX-RN outcomes. The lack of rigor in some studies that limited their internal and validity require the need to practice rigor in research in order to ensure the validity and reliability of research findings.

Finally, there is no published literature on the experiences of IEN while they were preparing for the NCLEX-RN. The lack of research on IEN NCLEX-RN experiences guided this qualitative study as it explored the experiences of IEN during their NCLEX-RN preparations. In general, a qualitative study, specifically qualitative descriptive study, is the appropriate research design to use when the phenomenon is understudied or there is lack of literature to understand the phenomenon of interest. The results of this study will be used to develop a conceptual base that will assist in understanding the experiences and the influence of a variety of factors on the NCLEX-RN outcomes of IEN. This study explored these NCLEX-RN preparatory experiences on IEN as well as the facilitators,

hindrances, and strategies that have influenced their NCLEX-RN outcomes. The findings may potentially add to the very limited literature on IEN and NCLEX-RN studies.

CHAPTER III

RESEARCH METHODOLOGY

This chapter presents the research methods that were used to explore the experiences of internationally educated nurses (IEN) while preparing for the NCLEX-RN. The research questions, the research design, participants, sampling technique, data collection, data analysis, and measures to establish trustworthiness in qualitative research are described. The logic of the method to address the research questions is explicated.

Research Questions

The primary aim of the study was to explore the experiences of IEN while preparing for the NCLEX-RN. The secondary aims were to identify the facilitating and hindering factors related to these experiences and to describe strategies in overcoming the hindering factors while preparing for the NCLEX-RN. In order to achieve these aims, this study answered the following research questions (RQ):

RQ 1: What are the experiences of IEN while preparing for the NCLEX-RN?

RQ 2: What are the facilitating factors that IEN experienced while preparing for the NCLEX-RN?

RQ 3: What are the hindering factors that IEN experienced while preparing for the NCLEX-RN?

RQ 4: What strategies did IEN use to overcome the hindering factors while preparing for the NCLEX-RN?

Research Design

A qualitative descriptive research design was used to explore the experiences of IEN while preparing for the NCLEX-RN. It identified themes and explored facilitating and hindering factors that were related to these experiences as well as the strategies that IEN used in overcoming the hindrances related to their preparation for the NCLEX-RN. The qualitative descriptive research design is an investigational approach that is used to understand poorly understood phenomena or when there is limited literature on the topic (Braun & Clarke, 2013; Creswell & Creswell, 2018; Polit & Beck, 2017; Sandelowski, 2000). Therefore, this method was chosen due to the paucity of literature on IEN experiences in preparing for the NCLEX-RN. This research design provides a credible means of capturing and exploring the experiences of IEN while preparing for the NCLEX-RN. Qualitative descriptive design approaches enable the researcher to obtain the direct descriptions of people who have experienced the phenomenon. It is a categorical form of inquiry, less interpretive than interpretive description, and does not require a deep interpretive lens into the data. It is the appropriate method to use to know who were involved, what was involved, and where did the phenomenon take place. Its goal is to develop a comprehensive summary of specific events, stated in everyday terms, experienced by a group of individuals (Lambert & Lambert, 2012). As a comprehensive summary, this study identified the themes that described the IEN experiences, as well as the facilitating and hindering factors related to these experiences in preparing for the NCLEX-RN.

Qualitative description is regarded as the research method that has the least theoretical underpinning (Sandelowski, 2000). However, its methods and strategies are based on the philosophies of naturalism (Sandelowski, 2010) and constructivism (Braun & Clarke, 2013). As a naturalistic inquiry, it is a method of inquiry that involves studying something in its natural state (Guba, n.d.; Lincoln & Guba, 1985 as cited in Sandelowski, 2000), pulling the data from its source and analyzing the information closer to the data (Sandelowski, 2000). Using the principles of naturalistic inquiry, qualitative description has no pre-selection and manipulation of variables and no *a priori* commitment to any theoretical viewpoint of the phenomenon (Sandelowski, 2000). It identifies patterns based on individual participant's data and builds on codes to create themes based on the common descriptions of the participants. This approach reflects constructivism, which is one of the philosophical bases of qualitative description. Constructivist inquiry is reflected in the categorization of themes that develops as the data emerge during the process of data analysis. As a constructive epistemology, knowledge is developed as a socio-linguistic process resulting from social experiences that lead to multiple realities, restructuring thinking, and collaborative reflection (Duane & Satre, 2014), which are suited for knowledge development in an unexplored or understudied area.

Internal and external factors exert an influence in understanding the multiple realities that IEN experience while preparing for the NCLEX-RN. The Nursing Universal Retention and Success (NURS) model provided a framework in understanding these factors as they affect NCLEX-RN experiences within the participants' context. Although the NURS model was used as the theoretical framework for this study, the researcher

needed to have a low theoretical sensitivity in order to prevent clouding of research data as themes emerged from the participant's qualitative responses. Theoretical sensitivity is the "ability to recognize and extract from the data elements that have relevance" for the phenomenon under study (Birks & Mills, 2015. p. 181, as cited in Tie, Birks, & Francis, 2019). It refers to the ability of the researcher to identify data that are meaningful and significant to explain the phenomenon (Tie et al., 2019).

The researcher allowed the themes to emerge from its natural state and did not identify the themes prior to data collection. A balance between open-mindedness on the participants' data and the emergence of themes and an insight on the concepts in the NURS model was observed in order to let the themes emerge from the data and not from the model. This approach helped in maintaining a low theoretical sensitivity, which is essential to maintain objectivity in qualitative studies. It is essential to have an emic perspective and yet, maintain low theoretical sensitivity and objectivity of the research data.

Participants

In this study, IEN specifically refers to graduates of a baccalaureate nursing degree in the Philippines. The selection of this population for this study was based on their majority representation in NCLEX-RN international applications (NCSBN, 2019) and their dominance as the largest group of IEN in the U.S. nursing workforce (Smiley et al., 2018). The participants of this study must meet the following inclusion criteria. The participant 1) must have graduated with a baccalaureate degree in nursing from a school of nursing in the Philippines; and 2) must have previously taken the computer-based or

computer adaptive testing version of the NCLEX-RN. The exclusion criteria are Filipino nurses who: 1) received nursing education in the U.S. and 2) completed nursing education other than a baccalaureate degree.

Sampling

Generally, any purposeful sampling technique is appropriate to use in a qualitative descriptive study (Lambert & Lambert, 2012; Patton (1990) as cited by Sandelowski (2000). Purposive sampling was used in this study and it is the recommended sampling technique for qualitative description in order to obtain participants who can provide information-rich data that will suit the needs of the study (Sandelowski, 2000). A small number of participants (10-20) for qualitative description is considered adequate for a “medium project” as an initial attempt to understand an understudied phenomenon (Braun & Clarke, 2013). The number of participants in qualitative research varies depending on the research purpose, research question, sensitivity and scope of the study, type of data analysis that will be used, richness of the participants’ data, method of collecting data, available time and resources, and saturation (Braun & Clarke, 2013; Morse, 2000 and Patton, 2002 as cited by Braun & Clarke (2013). This study aimed to initially build a conceptual base on IEN’s experiences while preparing for the NCLEX-RN due to its paucity in the literature, therefore, 10 to 20 participants is appropriate to answer the research questions and provides adequate amount of data to analyze the phenomenon of interest. As an incentive, a \$20 gift card was offered to eligible participants after completion of the interview. However, the conduct of virtual interviews and international location of participants hindered the distribution of the gift cards.

In order to ensure the collection of rich and thick data through purposive sampling, ongoing analysis of interview data was done. By analyzing the data from a previous interview, this helped the researcher determine the richness of the data that need to be collected in order to adequately answer the research questions. The process was iterative until the researcher believed that thick data has been sufficiently collected from the participants.

The final number of 20 participants was determined when data saturation was reached, which is a widely and accurately used rationale for determining sample size in qualitative studies (Bowen, 2008 and Charmaz, 2005, as cited by Braun & Clarke, 2013). Saturation refers to the point where participants repeatedly and consistently describe the same characteristics of the phenomenon being studied. It occurs when no new themes emerge from the participants' responses (Creswell & Creswell, 2018; Polit & Beck, 2017; Sandelowski, 1995).

Research Instrument

A semi-structured individual interview was the main interactive data collection technique for this study. Consistent with qualitative description, this technique is appropriate and directed at identifying the *who*, *what*, and *where* of the basic nature of the phenomenon to be studied (Braun & Clarke, 2013; Sandelowski, 2000). An informed consent was verbally obtained and a brief interview guide was used in collecting the participants' responses and demographic characteristics.

The interview guide consisted of two parts: Part I – Demographic characteristics and Part II – Interview questions. Part I gathered the participants' age, gender, civil status

when preparing for the NCLEX-RN, year of graduation from BSN, year of first attempt in taking the NCLEX-RN exam, nursing school and location, and advanced degrees when NCLEX-RN was taken. This demographic information provided information about the characteristics of the participants. In order to achieve the aims and to answer the research questions of this study, the following questions guided the semi-structured interview, which is the Part II of the interview guide:

1. Describe your personal experience when you were preparing for the NCLEX-RN.
2. How did you prepare for the NCLEX-RN?
3. Did you pass or fail the first time you took the NCLEX-RN?
4. Based on your NCLEX-RN result, what areas were below or near the passing standard? Did you retake the exam? How did you prepare for those areas on the test that were below or near passing?
5. What do you think helped you while reviewing for your NCLEX-RN?
6. Do you think race or ethnicity has a role in your NCLEX-RN testing experience? Why or why not?
7. What obstacles did you encounter while preparing for the exam?
8. If you encountered problems while preparing for the exam, what strategies did you use to solve them?

Follow-up questions were asked depending on how the participants answered the main questions. In order to gather relevant information to answer the research questions, deliberate attempts to ask factors that influence NCLEX-RN outcomes as identified in the

literature, such as language, work experience, support system, study habits, and other factors, were asked. This enabled the researcher to gather more information to produce rich and thick data on their NCLEX-RN experiences.

Data Collection

Approval from the dissertation committee and the University of North Carolina at Greensboro Institutional Review Board (IRB) was sought prior to conducting this study. IRB approval is critical to ensure protection of human participants in research. Plans for recruitment of research participants initially involved personal visits to two local medical centers, Wake Forest Baptist Health and Novant Health in Winston-Salem, NC, to distribute flyers or brochures to prospective participants working in different clinical units. Permission for recruitment and data collection was also sought from the two mentioned medical centers' Institutional Review Board. However, the COVID-19 pandemic restrictions and guidelines prompted the researcher to abandon this recruitment plan and focus on online recruitment.

The main recruitment strategy involved the use of online social media such as the researcher's personal Facebook page, which largely consists of registered nurses from the Philippines, and Facebook groups such as Nursing Review, Lefora Filipino Nurses to US, and Registered Nurse from the Philippines. Previous social interaction with the group's members, who are potential participants, through social or professional discussion on social media is a way to develop trust. Upon IRB approval, recruitment flyers were posted online on the abovementioned Facebook groups, specifying the purpose of the

study and the inclusion criteria to determine eligibility as a research participant. The researcher's UNCG student email address was provided to these prospective participants.

Online recruitment was successful with 26 potentials responding on the first 48 hours of advertising the recruitment. Although the proposal specified 20 participants, an additional number of participants were considered in the event of withdrawal or loss of contact with the other participants. The researcher contacted the individuals who have expressed interest to become study participants. Eligibility was validated based on inclusion and exclusion criteria. For eligible participants who were willing to be interviewed, verbal informed consent over the phone or social media platform that explained the nature, purpose, benefits, risks, ethical considerations, and data collection process, was sought.

Forty-five minute to one-hour individual interviews were conducted virtually through Zoom, Facebook video, or audio calls. Giving ample time for interview provides opportunity to develop participant's trust to the researcher. Individual interview is preferred over focus group since the researcher will be able to gather more comprehensive information on individual experiences. Follow-up, clarification questions, and more time can be allotted to collect data from individual participants. Additionally, individual interview is more favorable due to time and geographical constraints. Personal interviews were initially planned to be conducted either at participants' residence or on a location that is convenient for both the researcher and participant. This may include a coffee shop, library, or office. However, public health concerns related to the COVID-19 pandemic eliminated the conduct of personal interviews. Virtual interviews were then

conducted through Facebook video or audio calls or Zoom depending on the type and availability of technology and preference of the participant. Both types of interviews were recorded using two brand new digital voice recorders. The researcher took notes of participants' responses while conducting the interview. After the interview, the researcher transcribed the voice-recorded data using Microsoft Office 365 dictate feature. The transcribed data was analyzed using NVivo 12 data analysis software.

Personal and virtual interviews have their own advantages and disadvantages. The main advantages of personal or face-to-face interview include: 1) accessibility, it provides better chance for the researcher to interact with the participant and observe behaviors and setting that are helpful in creating memos or field notes, which are essential in producing thick data; 2) it gives the researcher more control to generate useful data for the purposes of the study; and 3) it offers flexibility in probing and asking unplanned questions (Braun & Clarke, 2013; Creswell & Creswell, 2018). The disadvantages of personal or face-to-face interview are: 1) it is time-consuming for both researcher and participants; 2) there is lack of anonymity, which may make passive participants more disengaged (Braun & Clarke, 2013); 3) it may create researcher and response bias because of the physical presence of a researcher (Creswell & Creswell, 2018; Polit & Beck, 2017); and 4) it may pose a health concern in the light of the current pandemic

On the other hand, virtual interview has its advantages: 1) it is more convenient for both researcher and participant since both can do the interview at the comfort of their homes; 2) it provides the participant a greater sense of control and empowerment since

they do not feel threatened with the physical presence of a researcher; 3) it provides more privacy and confidentiality making it is potentially more ideal for sensitive topics, such as admitting failure in a licensure exam, which may produce shame and embarrassment; (Braun & Clarke, 2013; Creswell & Creswell, 2018); 4) it allows participants from geographically distant areas to participate in a study (Polit & Beck, 2017); and 5) provides reassurance regarding health concerns brought about by the pandemic. Its disadvantages, however, may include: 1) less accessibility to some groups where there is limited online networks or mobile devices; 2) there is potential loss of context and lesser chance to produce thick data if the researcher cannot observe the non-verbal behavior of the participants; 3) risk of breach to data security due to unsecure network and mobile devices (Braun & Clarke, 2013; Polit & Beck, 2017).

In light with the aforementioned advantages and disadvantages of conducting personal and virtual interviews, the researcher ensured that the participant's interview followed ethical guidelines to uphold the participants right to autonomy, beneficence, non-maleficence, while maximizing the opportunity to collect rich data for the study.

Data Analysis

The main data analysis technique that was used in this study was qualitative content analysis since it is the recommended strategy of choice in qualitative descriptive studies (Sandelowski, 2000). Qualitative content analysis is a set of techniques to analyze textual data and explicate themes (Vaismoradi, Jones, Turinen, & Snelgrove, 2016) and it is derived from the participants' data where codes are generated during the development of the study (Sandelowski, 2000). It is a systematic approach of identifying codes in order

to provide a description of the social reality through the development of themes (Vaismoradi et al., 2016). To achieve this, the researcher needs to immerse into the data, read, re-read, and reflect on the data, in order to correctly identify the patterns and themes emerging from the participants' data. Data analysis in qualitative studies is a reiterative process where data collection and analysis are performed simultaneously (Braun & Clarke, 2002; Lambert & Lambert, 2012). During an interview, the researcher can simultaneously collect and analyze data, then write memos for possible inclusion in the research report.

The conduct of the interview and the writing of field notes after the interview facilitated critical reflection (Maharaj, 2016) and enhanced the richness of the collected data. Ongoing analysis, a process in which individual interviews were analyzed prior to the succeeding interviews, was done to analyze the emergence of themes and to determine data saturation. These techniques involve a dynamic form of verbal data analysis, aimed at providing a rich summary of the informational contents of the collected data (Altheide (1987) and Morgan (1993) as cited in Sandelowski (2000). A research notebook and memos were used to allow reflection and interaction with the data in order to accommodate new information and insights as they emerged from the data (Sandelowski, 2000).

It is essential to have a low theoretical sensitivity since qualitative description does not use pre-existing set of guidelines that are based on specific philosophical or epistemological view. This approach is necessary in order to accurately identify the themes that will emerge from the participants' data without being influenced by an *a*

priori insight on a specific theoretical framework since qualitative description is data-driven where patterns, codes, and themes emerge from the data during the conduct of the study (Lambert & Lambert, 2012; Sandelowski, 2000). A high level of theoretical sensitivity can distort the accurate representation of the participants' multiple realities when the researcher codes and categorizes the participants' data based on pre-conceived categories and themes from an existing framework.

Although the NURS model was used as the conceptual framework in this study, the six concepts of the NURS model were not be created before data analysis. The participants' responses were not coded to fit in to these concepts. The textual data were labeled or coded as the participants described the data. Consistent with qualitative description, creating codes using participants' own words or descriptions made the data analysis closer to the natural state of the data without resorting to deep interpretive lens (Lambert & Lambert, 2012). Textual data that were expected, unique, or discrepant were reported, whether or not they fall under the concepts of the NURS model. This strategy ensured that low theoretical sensitivity was observed during data analysis. Moreover, reflexivity and bracketing of the researcher's personal NCLEX-RN experiences and describing the participants' descriptions using their own words helped ensure presentation of findings that are accurately reflective of the participants' perspectives.

The actual steps of data analysis that were used in this study were based on the five-step recommendation of Creswell and Creswell (2018). First, the collected information was organized and prepared for analysis by transcribing interviews, visually scanning the data, writing field notes, and arranging data. The researcher personally

transcribed the individual interviews and in order to immerse himself into the data. This approach enabled initial data analysis as the data was being transcribed. Second, the data was read intently in order to get an overall sense and reflect on the meaning of the data. Reading and rereading the data helped in deciphering the real meaning of the research data as described by the participants. Third, coding was done, which is a process of bracketing or writing words at the margins of the arranged data to represent a category. Participants' statements were initially assigned codes to identify their experiences and to recognize factors that were facilitating or hindering their NCLEX-RN experiences. Based on the research question and interview questions, patterns were identified and categories were formed using the terms described by the participants. Statements or quotes with similar codes were clustered together to form categories. Consistent with qualitative data analysis techniques, ongoing analysis or comparative content analysis was done while transcribing each interview and prior to conducting the next interview (Cote-Arsenault & Ross, 2019) in order to determine the patterns and emergence of themes as well as to identify when data saturation is achieved. Individual interviews stopped once succeeding interviews do not produce new codes or categories. In this study, initial data saturation was determined after the 17th interview. To ensure true data saturation, an additional two to three interviews were conducted. Saturation was finally achieved after the 20th interview.

Fourth, descriptions and themes that reflect multiple perspectives from individuals were generated and these were supported by direct quotations to illuminate the themes. The people, places, and events in the setting were described. Participant statements that

were commonly identified, significant, unique, or one that has a contrary perspective were identified to highlight a theme. Fifth, the description and themes were presented through a narrative passage to convey the meaning of the results of data analysis. The data presentation was based on the prevalence of themes.

The themes were initially arranged using the NURS model as a guide but it was not limited to the concepts of the model since the data generated additional themes. Realizing not the NURS model was not a good fit to answer all the research questions, the model was only used to describe the themes that answered research questions two and three. Furthermore, the concepts of the NURS model were relabeled to reflect a more qualitative description. This approach ensured that an open-mind approach and low theoretical sensitivity were used to generate a rich description of the participants' experiences. Based on the number of categories that emerged, they were narrowed into more meaningful themes through a process called winnowing or the focusing on some parts of the data to aggregate them into smaller number of themes (Creswell & Creswell, 2018).

The interview data were transcribed into Microsoft Word document using Microsoft office 365 dictate feature and uploaded to NVivo 12 data analysis software to facilitate data organization and analysis. During this stage of data analysis, the researcher identified themes that achieved the research aims and answered the research questions. This process was done by selecting themes and quotes that illuminated the IEN experiences, facilitating factors, hindering factors, and strategies to overcome obstacles as the participants have prepared for the NCLEX-RN. Furthermore, reflexivity was

exercised in order to determine how my positionality as a researcher may potentially influence data analysis. An awareness of my personal experiences and background is critical in differentiating my own experiences as I prepared for the NCLEX-RN against the personal experiences of the participants when they prepared for their NCLEX-RN. Bracketing my personal experiences is critical to prevent clouding of data analysis and interpretation.

The research findings were presented as a straightforward summarization of the descriptive information from the collected data that is organized logically. There are different ways that qualitative data can be presented. Data presentation can be arranged chronologically or in a reverse chronological sequence of events; categories and subcategories; most prevalent to prevalent themes; broad to narrow context (Lambert & Lambert, 2012). In this study, the findings were presented in a manner that reflects the prevalence of themes to describe the experiences, the facilitating and hindering factors, as well as the strategies that were used to overcome obstacles when the participant prepared for the NCLEX-RN examination.

Positionality

It is essential that the researcher acknowledges positionality in conducting qualitative research. Positionality is defined as “the knower’s specific position in any context as defined by race, gender, class, and other socially significant dimensions” (Maher & Tetreault, 1994, p. 22, as cited in St. Louis & Barton, 2002). It is the “relational place or value one has that influences and is influenced by varying contexts such as social, political, historical, educational, and economical factors” (St. Louis &

Barton, 2002. p.3). Understanding positionality is critical to understanding the subjectivity of the researcher, which can potentially impact the participants' accounts of their experiences (Shaw, Howe, Beazer, & Carr, 2019; St. Louis & Barton, 2002). Without a clear insight on the researcher's positionality, this can distort the participant's view of their experiences, it undermines the skills of the researcher and the results of the study, thus limiting knowledge development (Shaw et al., 2019).

As a description of my own personal experiences while preparing for the NCLEX-RN, the following narrative will shed light into my positionality as an IEN and a researcher:

As an IEN working in the U.S., I have undergone the entire experience of preparing for the NCLEX-RN. My family background of professionals who value education, profession, and career, coupled with my childhood dream to work and live in the U.S. served as my primary motivation to choose nursing as a career. The 1980s was one of the peak eras in nursing education history in the Philippines when people considered a nursing diploma as a passport to the U.S. The nursing shortage in the U.S. paved the way for this influx and I was one of those who had that motivation and goal to work and live in the U.S. This intrinsic motivation made me to become a well-focused student, knowing that the education I will be receiving at the University of Santo Tomas in Manila, will be instrumental in achieving my dreams. I was aware early on that this nursing knowledge will eventually help me in passing the NCLEX-RN.

I graduated with a BSN and passed the Philippine Nurse Licensure Exam (PNLE) in 1993. I was determined to pass the PNLE because at that time, licensure from the country of origin is an immigration requirement to work as nurse in the U.S. The political and economic situation in the U.S. in the mid-1990s drastically changed and there was visa retrogression from 1994 to late 1999. While there was no immediate plan to take the NCLEX-RN at that time, my job as a nurse educator, a reviewer for the PNLE and NCLEX-RN, and a graduate student (Master of Science in Nursing) provided me the opportunity to continuously study and review nursing concepts, which eventually helped me a lot when I took the NCLEX-RN in 2002. The U.S. reopened its hiring of IEN on September 1999, where I responded to a newspaper ad for a North Carolina hospital. It took two

years to apply and process an employment-based visa. The anticipation of finally working as a nurse in the U.S. ignited my interest to start preparing for the NCLEX-RN.

International NCLEX-RN sites were only available starting in 2008 and the only means of taking the NCLEX-RN prior to 2008 was to take the exam in a U.S. territory, such as Guam or Saipan, which was expensive. I arrived in the U.S. on July 2002 and I devoted three months to study for the NCLEX-RN, before sitting for the exam in September 2002. During this period, my employer provided me one month of paid-hours to review for the exam. For the next two months, I had to work as a certified nursing assistant on eight-hour shifts five times a week. I had to study for the exam outside my work hours. While I was confident about the content of the exam, I was nervous about the computerized adaptive testing format since I have not taken any computer-based testing. In the end, after 75 questions, I passed the NCLEX-RN.

Overall, I consider my intrinsic motivation, career goal, excellent nursing education, graduate nursing degree, employment as a nurse educator, PNLE and NCLEX-RN reviewer, and employer support as factors that tremendously helped me prepare for the NCLEX-RN. Having a job while reviewing for the exam, feelings of uncertainty related to my adjustment to a new country, and anxiety related to the computerized form of the exam were hindrances that I faced during my NCLEX-RN preparation. However, my motivation, my dream for myself and my family, and my desire to become successful in the U.S. gave me the determination to pass the NCLEX-RN. These are my personal experiences as I prepared for the NCLEX-RN.

While these define my own personal experiences, they can also become potential sources of bias during the phases of data collection and data analysis. Reflexivity, which can be achieved by acknowledging my personal experiences as separate from the participants' experiences is critical in bracketing my perspectives as a researcher. Being aware of biases and personal experiences as an IEN and a nurse from the Philippines, it is vital that these attributes of the researcher will not cloud the PEN participants' stories and interpretation of their statements. The researcher can take an emic perspective to better

understand the concept and context of IEN familiarity with the NCLEX-RN. Having an emic perspective will provide insider knowledge to fully understand the participants (Shaw et al., 2019). The inclusion of how the researcher's background influenced the interpretation of results is an essential ingredient of qualitative studies (Creswell & Creswell, 2018). In this study, the researcher acted more as a participant rather than an observer since individual interviews were used as the primary data collection technique. Caution was exercised when describing participants' experiences in order to maintain objectivity and ensure the validity of the findings because the researcher's beliefs, political instance, and cultural background as well as gender, race, age, includes socioeconomic status and educational background may affect the research process (Bourke, 2014). In this case, objectivity of the results of the study was maintained.

As a Filipino, my ethnicity is an advantage in recruiting, developing trust and rapport, and providing an insider perspective of the personal experiences of the participants. As a former nurse and educator in the Philippines, my past experiences can provide a deep understanding of the PEN on academic factors that can influence the participants' preparations for the NCLEX-RN. Furthermore, being bilingual and proficient with both the English and Filipino (Tagalog) languages, this facilitates the data collection and data analysis process by providing the appropriate context on the participants' responses. Developing awareness of the researcher's background is critical in preventing bias in describing the participants' experiences. If this is not avoided, it can potentially distort the reality as perceived by the participants and can affect the results of the study (Shaw et al., 2019; St. Louis & Barton, 2002).

Trustworthiness

Lincoln and Guba's (1985) guidelines for establishing truth value in qualitative research were used to establish the trustworthiness of the results of this study. These are recommended activities that ensure credibility, transferability, dependability, and confirmability of research findings in qualitative research (Polit & Beck, 2017).

Credibility is a major goal in qualitative research and it refers to the truthfulness of the data (Polit & Beck, 2017). To ensure the study's credibility, member checking was observed. Formal member checking involves sharing the results of the study with the research participants, either individually or in groups, in order for them to validate that the results are reflective of their responses and to comment on the findings of the study (Creswell & Creswell, 2018; Lincoln & Guba, 1985; Polit & Beck, 2017). This can also be done informally during data collection by letting the participants confirm that their experiences and perspectives are understood (Polit & Beck, 2017). In this study, member checking was done individually during and after the data collection processes. During the interview, the researcher had the opportunity to ask for clarification on the participants' responses to ensure that the researcher correctly understood the participants' answers to the interview questions. This ensured that researcher has the participants' descriptions and perspective and it also provided the participants an opportunity to validate the authenticity of their statements.

After data collection and analysis, any information that needs to be clarified from the participants can be done by directly contacting the participants with their permission for a second contact. In general, member checking in qualitative studies provide the

participants a chance to know the results to give them an opportunity to give comments or feedback on the accuracy of the findings. However, in this study, member checking was mostly done during and after the interview and at the end of data analysis of each individual transcript. Prior to the first interviews, permission for a second contact with the participants was sought in order for the participants to validate the accuracy of their responses once the interviews are transcribed and analyzed. The second contact aimed to be a shorter session, approximately 10 to 15 minutes of virtual interview. Only a few second interview session were conducted to ensure that the researcher has accurately captured the participants' NCLEX-RN experiences.

Transferability refers to the potential to which the results of a qualitative study can be transferred or is applicable to a different group of individuals or a different setting (Polit & Beck, 2107). As a means of demonstrating transferability, purposive sampling, collection of thick data, and development of thick description were done. Through purposive sampling, identifying participants who had experienced the phenomenon under investigation can potentially provide rich data. First-hand information about the participants' characteristics helped in achieving purposive sampling, which added to the richness of the information that are needed to explore the phenomenon (Cote-Arsenault & Ross, 2019; Creswell & Creswell, 2018; Polit & Beck, 2017). Through individual interviews, a more detailed description about the participants' experiences with multiple perspectives provided a more realistic and richer research finding, which contributed to the validity of the study (Creswell & Creswell, 2018). Additionally, the research instrument included a section that collected the participants' demographic characteristics.

This information was needed in describing the participant's profiles in order to provide the necessary context to their NCLEX-RN experiences.

Dependability refers to the reliability or stability of the research data over time and conditions (Polit & Beck, 2017). Audit trail and member checking were used in establishing the dependability of the study. An audit trail serves as an objective reference to trace and reflect on participants' descriptions of the phenomenon that is being studied (Polit & Beck, 2017). The results of the study were shown to two members of the dissertation committee who are Ph.D. with expertise on the method of inquiry in order to develop confidence in the research data. These Ph.D. are UNCG university faculty members who are expert qualitative researchers. This likewise serve as the peer review as a means to establish both dependability and confirmability. In addition, and as previously mentioned, member checking helped ensure dependability of the research data (Guba & Lincoln, 1985) by performing member checks during and after the interview process.

Confirmability refers to the objectivity of the research data as presented by the participants, not the biases or perspectives of the researcher (Polit & Beck, 2017).

Reflexivity, audit trail, and peer review and debriefing are measures to develop confirmability of the study (Polit & Beck, 2017). Reflexivity refers to the awareness of the researcher on his or her background and experiences and their potential influence in the research process and outcomes (Polit & Beck, 2017). The researcher used reflexive notes to enable self- reflection in developing a deeper insight into the phenomenon of interest based on the participants' perspectives, and not based on his own subjective interpretations. Acknowledging the researcher's background and how it shaped the

interpretation of the findings is a characteristic of a good qualitative research (Creswell & Creswell, 2018). Knowing one's positionality as a researcher is a way to show reflexivity. Audit trail, the process of collecting materials that will enable an independent auditor to look into the conclusions of the study, was done together with peer review and debriefing. The researcher wrote memos and reflexive notes during and after each interview. This helped in keeping track of events and decision-making processes during the research process. Moreover, a codebook was developed to guide data analysis. This codebook is a written documentation that described the exact definitions of the different codes that were used during data analysis (Polit & Beck, 2017). The codebook helped to ensure consistency in data coding and analysis of participants' responses. These documents, memos, reflective notes, and codebooks served as the audit trail for this study. Processes to establish confirmability involved presenting the results of the study to other qualitative researchers. Two Ph.D. members of the dissertation committee reviewed the analyzed data in order to determine the adequacy of data that was needed to answer the research questions. This was important to help determine the presence of any biases or errors in presenting the results of the study.

Data Storage and Security

As a means to observe ethical principles in the conduct of research, various strategies were in place to ensure proper data storage and security to preserve confidentiality, privacy, and anonymity of the research participants. The participants' confidentiality was assured by assigning a codename to each participant. Although demographic information was collected, the participants were de-identified. To ensure

anonymity, participant's names were not attached to their transcribed data. The researcher securely handled the voice recorders and transcriptions in a secure and locked cabinet. Furthermore, data was stored in UNCG's Box in order to securely share the information with the PhD reviewer for audit trail and peer review. In compliance with UNCG IRB's guidelines, the recorded information from both voice recorders will be discarded and transcriptions will be shredded five years after the completion of the study.

CHAPTER IV

RESULTS

This chapter presents the findings of this study and it is organized into four sections: 1) the study and the researcher; 2) description of participants; 3) research methodology applied to the data analysis; and 4) the research findings. The section on research findings is further divided into five subsections: 1) the IEN NCLEX-RN experiences; 2) the facilitating factors of IEN NCLEX-RN experiences; 3) the hindering factors of IEN NCLEX-RN experiences; 4) strategies to overcome the hindering factors of IEN NCLEX-RN experiences; and 5) summary of research findings.

The Study and the Researcher

The researcher's professional role as a nurse educator and his personal experiences with the NCLEX-RN preparation as an IEN and a Philippine-educated nurse (PEN) were the main motivations for pursuing this research. His professional experiences as a nurse educator and administrator in the Philippines for almost 10 years prior to migrating to the U.S. sparked his interest in monitoring the individual and institutional performance of graduates in the Philippine nursing licensure examination (PNLE). His personal experience taking the CGFNS certification examination and the NCLEX-RN exam prompted his curiosity to study the statistics of PEN in the CGFNS and NCLEX-RN exams. When he continued his teaching career in the U.S., he shifted his interest to the NCLEX-RN while maintaining his curiosity on the performance of PEN. Recognizing

the vast number of PEN applying for and taking the CGFNS and NCLEX-RN exams, debates in the Filipino nursing community about the performance of PEN in these examinations further stirred his interest on PEN and NCLEX-RN. As the researcher examined the literature, he found that there were many parallels between the PEN and other international nurses seeking to be successful on the NCLEX-RN. The enhancement of his research skills in the PhD program and the discovery of lack of published studies on this area finally set the stage for his interest on this research.

The researcher believes that his emic perspective is critical in providing a deeper understanding of this underexplored phenomenon. He also acknowledges that this perspective may affect the interpretation of the study results. Nevertheless, precautionary measures were exercised throughout the research process to ensure bracketing and objectivity while recognizing positionality. These measures include seeking to be objective in selecting research participants, asking interview questions verbatim from the interview guide and restating or translating them when needed, responding to his emotions and thoughts through reflexive notes, translating interviews accurately, and describing participants' experiences based on their own perspectives.

Description of the Participants

Twenty participants voluntarily participated in this study. Table 1 presents the composite demographic and contextual profile of the 20 participants. Sixty-five percent of the participants (n=13) are females, 65% (n=13) are single, 25% (n=5) have master's degrees in nursing when they took the NCLEX-RN, 75% (n=15) passed the NCLEX-RN the first time, 60% (n=12) had healthcare work experience in the Philippines, and 55%

(n=11) had international healthcare work experience. Their mean age was 33.6 years (range = 28 – 44) and the mean age when they took the NCLEX-RN the first time was 26.8 years (range = 21 – 40). They graduated from BSN within the years 1996 to 2012 from various geographical regions in the Philippines, 60% (n=12) from Luzon, 20% (n=4) from Visayas, and 20% (n=4) from Mindanao. The participants took the NCLEX-RN from 2000 to 2020, with 50% (n=10) taking the NCLEX-RN within the last five years (2016-2020). The mean time lag between graduation from BSN to taking the first NCLEX-RN was 5.65 years (range = 1 – 12 years), 4.4 years (range = 1 – 12 years) for those who passed the NCLEX-RN the first time and 10.4 years (range = 9 – 12 years) for those who failed the NCLEX-RN the first time.

Table 1. Description of Participants at time of NCLEX-RN First Attempt

Demographic Characteristic	Frequency (Percentage)
Gender	
Males	7 (35%)
Females	13 (65%)
Age (in years)	
20-25	9 (45%)
26-30	6 (30%)
31-35	4 (20%)
36-40	1 (5%)
Mean age (in years)	26.8
Civil status	
Single	13 (65%)
Married	7 (35%)
Master's degree	
Yes	5 (25%)
No	15 (75%)
Graduation from BSN	
2011 – 2020	4 (20%)
2001 – 2010	15 (75%)
1991 – 2000	1 (5%)
Geographical location of school	
Luzon	12 (60%)
Visayas	4 (20%)
Mindanao	4 (20%)
Year of taking the NCLEX-RN	

2016 – 2020	10 (50%)
2011 – 2015	3 (15%)
2006 – 2010	5 (20%)
2000 – 2005	2 (10%)
NCLEX-RN Result	
Passed	15 (75%)
Failed	5 (25%)
Time lag (in years)	
1 – 5	10 (50%)
6 – 10	7 (35%)
11 – 15	3 (15%)
Healthcare work experience	
Yes	12 (60%)
No	8 (40%)
Location of healthcare work experience	
Philippines	12 (60%)
International	11 (55%)

Moreover, to facilitate understanding the context of individual participants, Table 2 shows the individual demographic profile of participants.

Table 2. Demographic Profile of Individual Participants

Codename	Age* (in years)	Gender	Civil Status	Year of Graduation from BSN	Year of NCLEX- RN**	Result of First Attempt	Graduate Degree	Time lag (in years)	HWE ***
Jan	28 (27)	Female	Single	2012	2019	Passed	No	7	P/I
Nicole	41 (36)	Female	Single	2011	2015	Failed	No	4/9	P/I
Em	30 (29)	Male	Single	2010	2019	Failed	MSN	9	P/I
JR	32 (21)	Male	Single	2008	2009	Passed	No	1	None
Angie	35 (21)	Female	Single	2006	2007	Passed	No	1	None
Mel	32 (31)	Female	Married	2007	2019	Failed	No	12	P/I
King	37 (25)	Female	Single	2006	2008	Passed	No	2	None
Dawood	34 (33)	Male	Single	2006	2018	Failed	No	12	P/I
Pong	31 (29)	Female	Married	2010	2018	Passed	MSN	8	P/I
KD	33 (31)	Female	Married	2008	2018	Failed	MAN	10	P/I
Blue	44 (24)	Male	Single	1996	2000	Passed	No	4	P
JM	30 (21)	Male	Single	2010	2011	Passed	No	1	None
Angel	35 (33)	Female	Married	2006	2018	Passed	No	12	P/I
Anne	34 (30)	Female	Married	2007	2016	Passed	MSN	9	P/I
Jackie	38 (23)	Female	Single	2004	2005	Passed	No	1	None
Yohan	35 (22)	Male	Single	2006	2007	Passed	No	1	None
KC	29 (23)	Female	Single	2012	2014	Passed	No	2	None
Mac	28 (27)	Male	Single	2011	2019	Passed	No	8	P/I
Samantha	32 (29)	Female	Married	2009	2017	Passed	MSN	8	P/I
Ricky	33 (21)	Female	Single	2007	2008	Passed	No	1	None

Note: *Age in parenthesis denotes age at NCLEX-RN first attempt; **Year of NCLEX-RN first attempt;

***HWE-Healthcare work experience; P-Philippines; I-International

Research Methodology Applied to the Data Analysis

Recruitment

During the research proposal stage, the plan for participant recruitment included institutional and social media recruitment. After the University of North Carolina at Greensboro Institutional Review Board approved the research proposal, participant recruitment was done immediately online through social media such as the Facebook groups Nursing Review, Registered Nurse in the Philippines, and Lefora Filipino Nurses to U.S. Social media recruitment provided a means to reach out to prospective IEN participants that would have been excluded by institutional recruitment. Considering the large proportion of Philippine-educated nurses work internationally, social media recruitment helped ensure that participants with varied healthcare experiences were recruited as participants. This recruitment method yielded 26 eligible participants who were working in different countries during the first week of recruitment. Simultaneously, communication with the two medical centers' IRB and research council were initiated. Due to health and safety concerns related to the COVID-19 pandemic, the researcher decided to focus on the participants who were recruited online. Although the IRB proposal allowed for a maximum of 20 participants, an additional of six participants were recruited in the case of attrition or withdrawal from the study. After participants expressed interest in study participation, the researcher contacted them to schedule their interviews. Time was a concern in scheduling the interview due to the time differences of the researcher and the participants.

Data Collection: Individual Virtual Interviews

A total of 20 individual virtual interviews were conducted within a two-week period. The researcher used two handheld battery-operated voice recorders during the interviews to assure a backup recording in case of problems with one recording. The researcher read the interview questions verbatim as they were in the interview guide and only repeated them when the participants asked them to be repeated due to technical issues or internet connectivity. Some participants needed clarification of the question. All participants were English-speaking and therefore English was the main medium used during the interview. In some cases, Filipino words were used to clarify the meaning of an English word for the participant. One participant spoke in Filipino most of the time. The researcher is bilingual and fluent in both English and Filipino (Tagalog). This was an advantage in data collection and data analysis because it enabled appropriate interpretation of the contextual meaning of participants' responses that were given in the Filipino language. The ability of the researcher to leverage knowledge of the two languages was useful in collecting data accurately and in making credible interpretations in the analysis phase.

During the interviews, the researcher used a research note book to write memos. Significant answers were written down. Consistent with ongoing analysis, these memos provided opportunities for the researcher to note follow-up questions, explore information, or write analytical or methodological comments.

Transcription

The researcher personally transcribed the interview data using the dictate feature on Microsoft Office. This enabled the researcher to immerse himself into the data and to enhance understanding the meaning of the data. This method of transcription provided opportunity to perform ongoing analysis and it helped the researcher in identifying codes and themes as the transcriptions took place. The transcriptions were done in English and for interview responses that were in Filipino, the researcher translated the participants' interviews into English, ensuring accurate translation, verbatim and contextually. Technical issues on the voice recording were noted in the transcriptions. Furthermore, the researcher transcribed the interviews within 24 to 72 hours after the interviews to ensure more immediate recall of each situation.

Bracketing

The researcher's nationality and personal experience with the NCLEX-RN may be a source of bias that can affect the interpretation of the results of the study. To maintain objectivity, the researcher used bracketing to differentiate his own experiences from those of the participants. Reflexive notes were dictated on Microsoft Office after the completion of the interview or transcription. Some participants' responses sparked emotionality on the part of the researcher. Acknowledging these emotions through reflexive notes served as a reminder to maintain objectivity in interpreting the interview data.

Coding

Consistent with ongoing analysis, in-vivo coding was done as soon as individual transcription was completed. The transcripts were read several times to develop understanding of the participant's responses. The first reading was done to gain a general overview of the data. The notes that were taken during the interviews were reviewed vis-a-vis the transcriptions. During the second reading, important responses were underlined in red ink. On the third reading, illuminating, unique, and discrepant quotes were highlighted. At least three rounds of readings were done before coding started. Codes were handwritten on the margins of the printed transcription. After four interviews were manually coded, categories and themes began to emerge. The researcher started to develop a codebook and assigned descriptions or definitions in order to maintain consistency in using the codes.

Sixty-five codes were created during the initial coding. The researcher started to use NVivo 12 software after the manual coding of the tenth interview. The coding was a cyclical process of reading transcripts, manual coding, and NVivo coding for the remaining ten interviews. During NVivo coding, individual interviews were read for the fourth time to ensure consistency in data coding and interpretation. Using the manual codes and the codebook, interview data were highlighted and entered into NVivo as nodes (codes).

Thematic Analysis

Thematic analysis commenced when the 65 codes (or child nodes in NVivo) were compared for similarities and differences. Similar child nodes were clustered together to

form 31 parent node or categories. Eight themes were finally identified based on these categories. Initially, the NURS model was used as a framework to present the themes that emerged from the interview data. However, the concepts of the NURS model do not reflect the richness and deep meaning that the participants conveyed. The names of the concepts are limited and do not reflect qualitative descriptions generated from participant interviews. The researcher renamed these concepts consistent with themes to reflect a more qualitative description of the concept. The themes were used to describe facilitating factors and hindering factors within the NCLEX-RN preparatory experience of IEN. Subthemes were named using participants' own words to bring the results in line with the data. Adopting the concepts from the NURS model, Table 3 presents the links between these themes and the concepts of the NURS model.

Table 3. Links Between Themes and NURS Concepts

Themes	NURS Concepts	Quotes
Being Filipino	Individual characteristics	"I don't think it was an issue for me because I think I comprehend the English language fairly well."
Being Positive	Affective factors	"I think about eagerness, your motivation, if you're really dedicated to pass and to achieve something you need to work on it."
Training as a Global Nurse	Academic factors	"I don't think it's about we didn't do the studying for the NCLEX but I think I did have a bit of a difficult time answering those things just because of background in education."
Learning Effectively	Environmental factors	"Study space is very important also. A study space that is conducive. I was living in a boarding house alone so there was no distraction."
		"Actually, to be honest those that were reviewed in the local board, I was able to use

Regulating Nursing Practice	Professional integration factors	them more for the NCLEX compared to the local board.”
Living in a Bigger World	Outside surrounding factors	“...I want to go to the U.S. soon but sadly, I think in 2007 or 2008 the U.S. had retrogression so it was closed. I was stuck in the Philippines for 10 or 11 years...”

Results of the Study

This subsection presents the research findings based on the four research questions. The research findings are presented as: 1) the IEN NCLEX-RN experiences; 2) the facilitating factors of IEN NCLEX-RN preparation; 3) the hindering factors of IEN NCLEX-RN preparatory experiences; and 4) the strategies that IEN used to overcome those obstacles. The results are presented as a listing of these experiences, which is consistent with the qualitative descriptive research design.

Research Question 1: What are the experiences of IEN while preparing for the NCLEX-RN?

There are two themes that described the IEN NCLEX-RN preparatory experiences: (1) *My NCLEX-RN Journey* and (2) *My Meaning of NCLEX-RN*. Table 4 outlines the themes, subthemes, and codes that pertain to the NCLEX-RN experiences of the participants.

Theme 1: My NCLEX-RN Journey

This theme refers to the aggregate participants' descriptions of their overall NCLEX-RN experience. It encompasses various stages of the NCLEX-RN experience including preparatory, testing, and post-testing experiences. The theme *My NCLEX-RN Journey* are divided into two subthemes: 1) *A Good Journey*; and 2) *Not an Easy Road*.

Table 4. Themes, Subthemes, and Codes of the IEN NCLEX-RN Experiences

Theme 1	My NCLEX-RN* Journey	
Subthemes	<i>A Good Journey</i>	<i>Not an Easy Road</i>
Codes	Easy Good Relaxed	Difficult Overwhelming Stressful Unforgettable
Theme 2	My Meaning of NCLEX-RN	
Subthemes	<i>The American Dream</i>	<i>It's an Investment</i>
Codes	As a stepping stone Privilege	Increases learning Blessing in disguise Greatest achievement

Note: *National Council Licensure Examination – Registered Nurses

Subtheme 1: A good journey. *A Good Journey* is described as a positive NCLEX-RN preparation experience. Some of the participants described their experience as stress-free, easy, good, excited, relaxed, and rewarding. These experiences were based on the various stages of the NCLEX-RN preparation, from the application process, conduct of review classes, and their actual testing experiences.

The NCLEX-RN application process was stress-free for Angie, who said, “It wasn’t stressful to do the application like the paperwork because the review center does that one for us.” In the Philippines, it is a popular approach to enroll in a review center to study for various local and international licensure examinations. Part of their services is providing assistance in processing the licensure application requirements. “Basically, I was just able to focus on studying. No stress with the paperwork at all,” Angie added.

Being able to focus on the NCLEX-RN review itself was contributory to a positive preparatory experience. Ricky, who also enrolled in a review center, shared that “It was easy because I am focused on my review.” The NCLEX-RN review class was a

major part of JM's description of his NCLEX-RN preparation. He said, "I had a good NCLEX journey...It went very smooth. It fits well for my needs." He attributed this to a structured schedule provided by an established international nursing review provider, which he further described as a standardized and a very systematic review program. JM graduated from nursing a year prior to taking the NCLEX-RN and his apprehensions about transitioning from the Philippine Nurse Licensure Examination (PNLE) to the NCLEX-RN was eased with the quality of review program he chose. In contrast, because of Nicole's PNLE was recent in relation to her NCLEX-RN made her feel relaxed during her NCLEX-RN preparation. "I was so relaxed. I felt like that because the time I took the exam (NCLEX-RN), it was so close to when I took the board exam in the Philippines (PNLE)," Nicole said.

Testing can be an anxiety-provoking situation for most examinees but for Anne, she was excited when she was actually taking the NCLEX-RN exam. Anne joyfully shared, "During that exam, it was more on, like, excitement because...they gave me my favorite systems in med-surg (medical-surgical nursing)." Generally, the preparation for the NCLEX-RN may be positive but it doesn't necessarily mean it's an easy process. As Yohan claimed, "It's not an easy thing to do but definitely worth it, I think," as he referred to the numerous benefits of having a U.S. nursing license. Overall, fewer participants reported a positive NCLEX-RN experience.

Subtheme 2: Not an easy road. On the other hand, more participants had negative NCLEX-RN preparation experiences. These negative experiences were labeled as a subtheme, *Not an Easy Road*. They described their experiences as difficult,

overwhelming, stressful, and exhausting. These negative experiences were related to the difficult and long NCLEX-RN application process, competing priorities such as work and family, and the challenges brought about by the examination itself.

Preparing for the NCLEX-RN involved making sacrifices and overcoming challenges, as Mac said, “There was a lot of, you know, barricades and challenges...challenging, I think that’s the maximum word that describes it.” Mac is the breadwinner of his family, who is a nurse in the United Arab Emirates (UAE). He found it challenging to have a family in the Philippines for financial support when he was studying for the NCLEX-RN. His work schedule was a challenge for finding time to study. He described his work schedule and study time as, “If my shift is from 7:00 AM to 7:00 PM, I wake up at 3:00 AM just to review and then after my work at 7:00 PM I also give myself time to review until 11:00 PM.” Similarly, challenges related to work and review time were shared by Blue, who at the time of his NCLEX-RN review had to make a lot of sacrifices.

It involved a lot of, lot of sacrifices on my end because I was already, I was working actually as a head nurse at the ICU at that time and then I was also the continuing education coordinator so it was a lot. Yes, it was tough! And yes I think I remember also, I was in a master's program as well in UP Manila (University of the Philippines). I was doing a lot (laughs).

The NCLEX-RN experience can be overwhelming and stressful due to the nature of the test itself. “It’s overwhelming because honestly, I don’t know where to start...I don’t know what to read to begin with” Jan said. This was corroborated by KD’s description of her preparation, “Preparation wise, very...a little bit stressful because you

don't know where to start.” Both participants were referring to the breadth and depth of topics that they needed to study, considering the differences in content and type of test questions on the NCLEX-RN exam.

The nature and difficulty of the NCLEX-RN served as a stressor to most participants. Their level of familiarity with the type of NCLEX-RN questions, particularly the multiple response or select all that apply (SATA), was a major challenge. Pong attested to this by saying, “It was nerve wracking! When I took the NCLEX, on the day itself I entirely lost my self-confidence. It's like, I totally lost, totally dumbfounded, should I say. I was confused with the questions specially when I encountered the SATA.” Nicole had a similar experience as she shared her first NCLEX-RN exam, “During the first time, all the questions, everything was difficult,” while KD vividly recalled,

...when I saw the first question I was totally blank. It was like, where did this come from? Then comes the second question, the third question, then I have no idea where these questions come from. So the more I encountered questions that I cannot relate to, the more that I got pressured during the exam. So where did this come from, I didn't read anything about this.

Yohan provided a different perspective by saying, “The realization that it was just very different, the PNLE and the NCLEX, just two different exams, so for me, that was, that was stressful.” The structure of the NCLEX-RN and how it differs from the PNLE were major concerns.

Other participants described their negative experiences based on the level of difficulty of the NCLEX-RN and the computer adaptive nature of the exam. The

expectation that finishing the test with 75 questions made the participants nervous when their test did not stop at 75. As KC remembered,

It was very stressful. I was expecting just 75 questions. But it went over, so when it hit the 75 questions, I was like, why does it keep on going or how come it's not stopping? That was the stressful part and I finally stopped at like 120 something questions so I was relieved.

The shift from studying for the PNLE to preparing for the NCLEX-RN also contributed to the negative preparatory experience of some participants. As Yohan recalled,

If I remember, trying to remember my experience with the review of the NCLEX, it was quite stressful. So in less than a year, I moved from taking the local boards in the Philippines. So I was still reeling from studying so much for that exam and I decided to study for the NCLEX as well out right after that. So to put it simply, it was really very stressful.

King supported Yohan's statement and mentioned, "It was exhausting, it was pretty exhausting because I have to shift studying the local board and studying the NCLEX." Yohan continued to explain that the stress was related to the differences in both the content and format of the licensure examinations. Moreover, concerns about the amount of information needed to study for the NCLEX-RN and the financial implications needed for the NCLEX-RN added to the stress of preparing for the exam.

Other participants attributed their negative preparatory experiences on their absence of healthcare work experience and how recent they took the NCLEX-RN after passing the PNLE. Jackie, who took the NCLEX-RN in 2005 a year after graduating from BSN, revealed that, "I have very challenging experiences. I have no experience in the

hospital so I have a hard time to relate in the situation especially um when the practical questions will arise in practicing the test question.” Furthermore, the participants had contrasting views on the impact of how recently they had taken the NCLEX-RN following graduation from BSN.

Those who graduated in 2006 had a very unique experience due to a controversial incident that jeopardized the nursing licensure exam, which the participants referred to as the “nursing exam leakage,” that caused them to be anxious about their future, including NCLEX-RN and nursing jobs. Yohan sadly recalled,

I remember thinking, you know, did I have to retake the exam or what does this mean for um job prospects, my job prospects in the Philippines, not just in the Philippines but also abroad. So, after that, there was a lot of...there were a lot of nurses who had a hard time looking for work because, because of the bad controversy. For me at least that added to the stress of having to study for the NCLEX.

Other participants who graduated in 2006 similarly shared anxieties related to this 2006 PNLE leakage controversy.

The NCLEX-RN experience was also described as unforgettable in a negative way because their failure on the NCLEX-RN exam was the first nursing exam that they had failed. As Em described it,

It was really one of my unforgettable memory because honestly, it is the first time that I fail in a nursing exam. It really give me the pressure afterwards. Not to the point that I am really going to get depressed but in a very, very low mood to that point that, Oh, my God, am I going to throw away my American dream?

The failure did not only signify failing the exam and its emotional consequences but also failing to reach a bigger goal, the American dream, a goal that described what success on the NCLEX-RN means to the participants.

Theme 2: My Meaning of NCLEX-RN

An unexpected finding in this study that consistently emerged from the interview data was the meaning of the NCLEX-RN to the participants. They wanted to pass the exam not only for their own future, but also for their families. The meaning of NCLEX-RN among the participants reverberated during the interviews, which prompted the researcher to label it as a theme and an incidental but relevant finding since it captured the very essence of the Filipino nurses' NCLEX-RN journey. Two subthemes to describe *The Meaning of NCLEX-RN* are: (1) *The American Dream*; and (2) *It's an Investment*.

Subtheme 1: The American dream. Almost all the participants made reference to their dream of working and living in the U.S. for a better future for themselves and for their families as the main reasons for taking the NCLEX-RN. They perceived the NCLEX-RN as a stepping stone and a privilege; thus, the phrase “the American dream.” Ricky had this dream and stated, “Well, my dream to become a U.S. RN. I want to come here to America. Because for Filipinos, that is the ultimate for a nurse - to come here as a nurse,” while Nicole, who was in the U.S. at the time of the interview, recalled about those moments when she was still working in Saudi Arabia, “We dreamed together, our American dreams,” as she referred how she, together with her Filipino colleagues, dreamed of working in the U.S.

For some, the American dream emanated from a childhood dream, which was largely influenced by their family and relatives. As a childhood dream, Samantha recalled that, “Since I was a child, my mom would tell me to go to the U.S. when I grow up, to be a nurse and go to the U.S.” and Pong similarly shared,

I was really inspired by my grandmother to go to the U.S. She told me to take up nursing and since nursing was my dream since I was a child, so I just associated my childhood nursing dream to be a nurse and my dream to go to the U.S.

In contrast, for some participants, the U.S. was not their original dream destination to work as a nurse. However, life circumstances made them shift priorities and led them to plan to permanently settle in the U.S. The United Kingdom (U.K.) and the Middle East are other popular destinations for Philippine-educated nurses (PEN). The economic crisis that hit the Middle East was one reason for some IEN to choose the U.S. as their destination, as Dawood reported,

I’ve been working here in the Middle East for almost eight years. I feel like I need to settle already...I don’t see myself working in other countries but because of the crisis, I feel like I need to take steps to be permanent as a nurse like in U.S.

The high score on international English exams such as the International English Language Testing Service (IELTS), a requirement to work as a nurse in English-speaking countries, was quite challenging for some IEN. This high IELTS score compelled them to find a country that qualified them based on their English test scores. Such was the case of Mac who shared, “I tried to take the IELTS way back 2018, March 2018. Actually, my

first plan was to go to the U.K. but my test score was not fit for the U.K., it was fit for the U.S. and that's the time that I applied for the NCLEX.”

While passing the NCLEX-RN is synonymous with reaching the American dream, failing the exam can have a devastating psychological impact. KD attested to this by saying,

It is hard to pull back yourself when you fail an exam. Maybe the American dream is not for me. Maybe this is not for me. Maybe it's another way. Maybe I am for the UAE. I might go back to the Philippines. You know it affects your self-esteem and it lowers your self-confidence.

Nevertheless, the participants' determination to succeed was strong and served as a strong motivation to focus more on succeeding an NCLEX-RN attempt. Em fittingly captured the meaning of his NCLEX-RN experience when he uttered, “...if you want to give all the best thing in the world for your family, you will have your will and motivation to strive more harder and pursue your American dream,” referring to his commitment to retake the NCLEX-RN after he failed on his first attempt and eventually making it successfully on the second attempt.

It's a stepping stone. Representing licensure to practice nursing in the U.S., the participants considered passing the NCLEX-RN as a stepping stone because it opens opportunities for a better future, personally and professionally. For JM, “NCLEX...is one big motivating factor and I believe there is better life for nurses here in the U.S. and I was not wrong...it's a motivation to be successful financially and career wise.” Yohan's personal experience affirms this meaning of the NCLEX-RN with his statement,

I think the NCLEX was a stepping stone in terms of getting to the bigger goal of basically, you know, where I am right now, you know, having a Master's degree and looking to a Ph.D. And these are all bigger goals for me, yeah, at least for my career. So for me, the NCLEX was a stepping stone to bigger dreams, basically.

Moreover, for Angel, focusing her efforts and making sacrifices for the NCLEX-RN was a key to something bigger, "All I have to do is focus on the exam, 'cause he (husband) said, 'that will be our ticket, that you are, you are the only key,'" as she recalled leaving their kids with her husband in Riyadh (Saudi Arabia) to have a dedicated two-week review and take the test in Manila (Philippines). The significance and meaning placed on passing the NCLEX-RN as a stepping stone become a goal that produced a concerted effort for them and their families.

It's a privilege. The participants also viewed their NCLEX-RN experience as a privilege, recognizing that "not all have the opportunity to sit down and write the NCLEX after completing the BSN, because BSN is very expensive," according to JM. Angel also said, "Not everybody is privileged to sit for the test. I came from the province and life there was, we were not that privileged..." referring to her economic and living conditions in the Philippines. The participants primarily mentioned about the high cost of nursing education in the Philippines and the exorbitant expenses associated with the preparation and requirements for the NCLEX-RN, such as enrolling in review centers, taking the IELTS examination, and applying for the CGFNS certification exam or credentials evaluation.

Subtheme 2: It is an investment. The NCLEX-RN experience is perceived as an investment of time, effort, and resources. It is an investment for their learning and for achieving a higher social status. Angel described her experience as,

...and it is really like an investment. He (her husband) said, 'You have to take it as much as possible with one take but at least you have to invest.' So I invested on that. I really spent like another 20,000 to 30,000 (in Philippine pesos)...every dollar that, that's on that preparation, it's worth hours of hard work.

The length of preparation to study for the NCLEX-RN takes between two to 12 months, depending on the capabilities and resources of the examinee. In the case of Ricky, "I have like 3 months review", while Pong had a longer time to prepare, "The peak of my review was when I shut down my social media for six months before I took the exam. But all in all, I think it's one year." Preparing for the NCLEX-RN was a financial investment because according to Yohan, "...the financial aspect of it, just because things were just expensive, the processing your documents from the Philippines and sending them over here..." "Those took hundreds of dollars maybe \$400, which was very expensive that time. Now, I think that costs \$700.00," JR added.

The participants acknowledged the contribution of their NLEX-RN preparation in increasing their nursing knowledge. Angie shared, "I like reviewing for the NCLEX I really learned a lot," and King agreed, "Like when I had the NCLEX it gave me a view of what the healthcare system in the U.S. is like. It is an inspiring experience to know that your knowledge grew because of the NCLEX experience." The participants recognized the differences in the PNLE and the NCLEX-RN and the differences in the healthcare

systems in the U.S. and other countries. Learning about these differences improved their knowledge.

It's the greatest achievement. Nevertheless, despite the challenges experienced by the participants during their NCLEX-RN preparation, passing the NCLEX-RN provided a sense of great achievement. Samantha proudly shared how she felt on passing the NCLEX-RN, “NCLEX is like, wow, the top among the ambitions of a nurse, to be a U.S. RN.” The international nursing community perceives the prestige of passing NCLEX-RN RN exam differently. This was attested by Pong,

...here (in the Middle East), if you are an NCLEX passer, you have a different caliber among the nurses. People look at you differently. They will be surprised...It's the most difficult exam in nursing; that is what they are saying. For me, this is the proudest moment in my entire life. It's the greatest achievement for me.

The participants view the NCLEX-RN as the most difficult nursing exam and a goal that is hard to achieve. Therefore, successfully passing the test provides a sense of achievement.

As a summary to answer Research Question 1, the NCLEX-RN preparatory experiences of IEN were described both as positive and negative experiences, identified as *A Good Journey* and *Not an Easy Road*, respectively. An IEN's personal experience was “larger than life” because it is a reflection of their aspirations for a brighter future for themselves and their families. Participants attached different meanings to their NCLEX-RN experiences, as a stepping stone, a privilege, and an achievement, depending how

those experiences affected their personal and professional lives. Hence the subthemes, *The American Dream* and *It's an Investment*.

Research Question 2: What are the facilitating factors that IEN experienced while preparing for the NCLEX-RN?

Facilitating factors refer to factors that were contributory to the positive NCLEX-RN experiences and outcomes. There were six themes to describe the facilitating factors of IEN NCLEX-RN experience and these include: 1) *Being Filipino*; 2) *Being Positive*; 3) *Learning Effectively*; 4) *Training as a Global Nurse*; 5) *Regulating Nursing Practice*; and 6) *Living in a Bigger World*.

Theme 1: Being Filipino

Being Filipino is a theme that refers to various individual, contextual, and collective characteristics of Filipinos as an ethnic or racial group that had influenced their NCLEX-RN experiences. Theme 1 has four subthemes: 1) *The Filipino Family*; 2) *Filipino Traits*; and 3) *The Global Nurse*. Table 5 outlines the theme, subthemes, and codes related to *Being Filipino*.

Table 5. Theme, Subthemes, and Codes of Being Filipino

Theme 1	Being Filipino		
Subthemes	<i>The Filipino Family</i>	<i>Filipino Traits</i>	<i>The Global Nurse</i>
Codes	Filipino family	Religious	Healthcare experience
	Breadwinner	Optimism	Lack of experience
	Relatives	Nationalism	
	Childhood dream	Competitive	
	Childhood experience	Caring	
		Persistence	
		Paternalism	
		Value for education	
		Language	

Subtheme 1: The Filipino family. The participants' commitment and dedication to their families emerged as the most common subtheme on *Being Filipino* that motivated them throughout their NCLEX-RN experience; hence, the subtheme, *The Filipino Family*. Their families served as the primary motivation and the essence of their sacrifices for working overseas. The support of their families was a huge positive influence on their NCLEX-RN preparation. Family, relatives, and childhood experiences influenced their aspiration to become a nurse and migrate to the U.S.

Their commitment to their families was evident when Nicole, who worked as a nurse in Saudi Arabia, stated,

Whenever I am reviewing, what always comes to my mind is my family, their encouragement that I can do it. And I also think about the future of my kids. That if I will pass the exam, I will be able to provide them with a better future.

This was further affirmed by Yohan, "Bigger dreams involve being able to provide for my family, giving my parents a good retirement." Mac further supported by saying, "As Filipinos, we are so focused on our goals and that is always about our families. That's why we are doing these things," referring to his sacrifices to work overseas in order to support his family financially and provide a better life. They wanted to offer their success to their families. As Em, who works in Abu Dhabi (UAE), mentioned,

I am the only breadwinner in the family. So, if I am not gonna do very good in my NCLEX, and if I am not going to have my NCLEX license, my American dream, my family will suffer.

The participants consistently described their families as the reason for their hard work,

leaving their families in the Philippines to work as nurses overseas.

Childhood influences. Early childhood experiences that indirectly contributed to the participants' NCLEX-RN experience were related to family influences on their choice of nursing as a career, learning English as a child, and exposure to people of different ethnicities. A strong motivation to pass the NCLEX-RN stemmed from their childhood aspirations to become a nurse and migrate to the U.S., which is a common reason to study nursing in the Filipino culture. This aspiration is largely shaped by the influences of families and relatives who are either health care professionals in the Philippines or in the U.S. Samantha said, "they (parents and relatives) wanted me to go to the U.S. because it is a high paying job, yeah, I think those are the factors that I can think of that helped me with NCLEX."

The use of the English language as early as childhood contributed to the proficiency with the language, which was a major facilitating factor for KC. "I spoke English growing up, so I have like have a good understanding of things," KC stated. Childhood exposure to different ethnicities can also help shape an individual's perspectives about cultural differences, which is very crucial in understanding the U.S. healthcare system. Blue shared his experience,

I think my upbringing also helped so much because when I was growing up I, although, you know, I was mainly with Filipinos, I did have a lot of experiences with other cultures...had I not, you know, had those experiences as a child and as an adult, I would not be as open. I would not be as effective...Not having that awareness I think impacts the way you are perceived, you know, because a nurse is not aware of that cultural component of care and how effective are you in providing care and how effective you are in answering questions like that in the NCLEX exam especially.

These early influences helped shaped their perspectives as a person and in choosing a career that is mutually beneficial and productive for themselves and their families.

Family support. Support from family and significant others provided a very positive influence on their NCLEX-RN experiences. The type of support included psychological (e.g. encouragement, supporting decision to resign from job in order to review), physical (e.g. free from household chores, childcare), and financial support (e.g. paying for review classes). As JM shared, “Number one is the support of the family which is very important that they need to understand the situation and they supported me financially, emotionally that they were paying for my review.”

While most of those who passed the NCLEX-RN the first-time were single when they sat for the test, those who were married at the time of the test found invaluable support from their spouses. The support provided by their spouses contributed to having more study time, less stress, and more focus to study. Being married but without kids was also favorable during their NCLEX-RN preparation. Samantha shared the tremendous support coming from her husband,

I’m married so my husband helped me. For the period of time I did not do any chores at all...I don’t have a child yet so I don’t know if not having any children, I mean...um because, you know, like for others, if there are kids it would be difficult to focus.

With various forms of support, the presence and quality of the support the participants received from their families and significant others provided a positive influence on their NCLEX-RN preparatory experiences.

Subtheme 2: Filipino traits. The participants believed that most of their traits as Filipinos were facilitating factors on their NCLEX-RN preparation. They reported unique Filipino characteristics that motivated and guided them on their NCLEX-RN journey. Family-centeredness and religiousness emerged throughout the 20 interviews as the main facilitating factors. They mentioned that their culture of caring, competitiveness, resilience, optimism, paternalism, resourcefulness, and value towards education are unique Filipino characteristics that helped them throughout their NCLEX-RN experience. Being bilingual was also considered as an advantage.

Resilience is a common Filipino trait that was embodied in Jackie's statement when she said,

I am an average person but with hard work and determination, strong faith, and a positive outlook that you can make it even though you are faced with hardships. I just did my best and leave to God the rest. It's more of a positive attitude to your review.

On the value of education, Yohan reported, "I know my family really valued education or at least values education. That really helped me a lot on the exam," while Angie shared the paternalistic side of her culture,

Actually, one of the reasons why I took the NCLEX, my dad just wanted me to take the NCLEX. My family encouraged me to do it, like you know, in the Filipino culture we listen to our family... So it's part of our Filipino culture to listen to our parents. Like study, you know, they help us, they guide us with career.

Raised in a religious culture in a predominantly Roman Catholic country, the participants exhibited a very high level of spirituality throughout their entire NCLEX-

RN preparation and during the examination. Jackie attested to this by saying,

I'm trying to be spiritually prepared as well I go to church often times, about two to three times a week...I believe that there is a God that always help you. Spiritually, I have a very strong faith and that teaches me what I cannot do during the exam.

As a developing country, living standards in the Philippines can sometimes be challenging but the resilience and optimism of the participants helped them overcome obstacles that they have encountered during their NCLEX-RN preparation. Given their sense of nationalism and competitiveness, the NCLEX-RN was perceived as an opportunity for them to demonstrate that despite receiving a nursing education from a different country, they are capable of passing a U.S.-based nursing licensure exam. According to Nicole, "as Filipinos we are known to be competitive, that we can show that we can do it." A similar sentiment was shared by Pong, "...when I took the exam, I felt like I have to prove that I also have the same capabilities like those who are in the U.S. If they can pass (the NCLEX-RN), I can also pass."

Additionally, the participants are all bilingual, able to speak and read both English and Filipino (also called Tagalog) fluently. The majority of the participants could speak a regional dialect such as Ilocano, Ilonggo, or Chabacano. Sixty percent of the participants did not consider language as a hindrance on their NCLEX-RN experience. They attributed the use of English as the official second language of the Philippines, the use of English as the medium of instruction in all levels of education beginning at kindergarten up to graduate school, and the use of U.S.-authored nursing textbooks in Philippine nursing schools as reasons why language was considered as a facilitating factor for their

NCLEX-RN preparation. In addition, English is used in all in-curriculum course examinations, except for Filipino language subjects or courses, in all levels of education in the Philippines, including the Philippine Nurse Licensure Examination (PNLE).

Yohan believed,

I don't think it was an issue for me because I think I comprehend the English language fairly well. But for me personally, I don't see that as an issue because most of our exams, or I'd say all of our exams in the Philippines are in English anyway.

In the same way, King shared, "I don't think so because we are taught English all throughout. Since elementary we know that." This statement was supported by Samantha saying, "...our second language is English so we can communicate and also our (nursing) books, they are in English and our textbooks are U.S.-based textbooks." Their statements referred to the use of the English language as a medium of instruction and English as a course that they learn in the curricula from basic to collegiate education in the Philippines.

The participants attributed much of the positive influences of their NCLEX-RN experiences on their positive outlook in life and abilities to overcome challenges, which are strong Filipino traits that they labeled as "the resilience of the Filipinos." Their deep sense of spirituality provided a strong aspect of support that divine intervention can help them achieve their goals. Their high regard for education and proficiency with the English language led them to achieve more and develop a sense of nationalism and global competitiveness. They identified these Filipino traits as facilitating factors on their NCLEX-RN experiences.

Subtheme 3: The global nurse. *The Global Nurse* is a subtheme that uniquely describes the Filipino nurses' healthcare work experience (HWE) as a registered nurse who has worked both in their country of origin and in other countries, which has influenced their NCLEX-RN experiences. The subtheme was aptly labeled to reflect the Philippines' role as the world's largest supplier of migrant nurses globally.

The presence and absence of employment, place of employment, and work hours played a role on the quality of the participants' NCLEX-RN preparatory experiences. Unemployment or absence of previous HWE during their NCLEX-RN preparation was described both as a facilitating and a hindering factor. As a facilitating factor, being unemployed provided more time and flexibility to focus on reviewing for the exam. More than half of those who passed the first-time were unemployed during their NCLEX-RN preparation. KD mentioned how this situation helped her, "I wasn't working...I was just at home...so I had that time to be able to sit and study. I think that was my biggest (facilitating) factor." King shared a very similar experience, "I got time, I had all the time in the world. That was really a big plus. I did not have to think about anything...I can focus on it. That was really a big factor that time that I'm not working."

In contrast, having previous or current HWE during the preparatory time provided benefits to their NCLEX-RN experience. The ability to apply the concepts and skills learned from their HWE influenced their preparatory and actual testing experiences. Blue, who worked as an intensive care unit (ICU) head nurse in the Philippines said, "If my work experience helped me? Definitely yeah! Definitely." Likewise, Nicole, who worked as a staff nurse both in the Philippines and in Saudi

Arabia shared,

I was able to apply my knowledge in clinical practice in taking the exam...when I was in Saudi, I was assigned in the NICU (neonatal intensive care unit) and the equipment are more advanced. I was also able to encounter different cases. Yes, that's a huge factor to have a clinical experience.

However, the location of their HWE resulted in significant variations on their overall NCLEX-RN experiences and outcome. The participants who had HWE started as staff nurses in hospitals or faculty members in nursing schools in the Philippines. Most of them continued to work as staff nurses in Middle Eastern countries like Oman, Qatar, Saudi Arabia, and the United Arab Emirates (UAE). One participant worked as a nurse in Saudi Arabia and as a health care assistant (HCA) in Canada, and another participant worked in the U.S. as a certified nursing assistant (CNA), then as a licensed practical nurse (LPN). Most of the participants corroborated that their HWE outside the Philippines were more beneficial in preparing them for the NCLEX-RN and this was attributed to exposure to a variety of cases they had dealt with, use of advanced technology, close similarity of their work practices with U.S. hospitals, progressive HWE from CNA to LPN, and employment in Joint Commission International (JCI)-accredited hospitals. Only three participants reported that their HWE in the Philippines contributed to their NCLEX-RN experience.

Referring to their international HWE, Jan, who worked in Saudi Arabia said, "...it helped me a lot because I was assigned at the neonatal intensive care unit and some of the critical questions that I encountered are in the NCLEX. I used them also to answer questions." Similarly, for Em, a nurse in the UAE, similarly reported,

And it also helps that since I am working in an American hospital here in UAE, it helps that I know JCI...because when it comes to the machines, when it comes to the protocol, the guidelines, they are American-based, which you can observe in some of the NCLEX questions.

On the other hand, three participants described their Philippine HWE as a facilitating factor on their NCLEX-RN preparation, stating that the nature of their work as an ICU nurse, nursing faculty member, and lecturer in a review center tremendously helped them learn nursing concepts and develop critical thinking. Blue attested to this as follows,

Working in the ICU, I think, puts you to a level of expertise where you are really expected to learn much more...It's more like a lot of critical thinking involved...So that in itself is very useful, as well, because it helped me develop my critical thinking skills. And of course, you know, answering NCLEX questions, definitely have to have critical thinking skills. Because it's one of those things that the NCLEX measures you know critical thinking and how you would provide care safely to patients.

Supporting that HWE in the Philippines contributed to a positive NCLEX-RN experience, Anne said, "Being a faculty helps because there are concepts that you need to understand first before teaching...Yeah being a nurse faculty or educator helped a lot." As a faculty member or a review lecturer, a strong knowledge base of foundational nursing concepts is crucial, which provided benefit to the NCLEX-RN experiences of two participants.

In summary, the theme *Being Filipino*, described the participant's individual and cultural characteristics that helped them throughout their NCLEX-RN experiences. Their family-centeredness, early influences of childhood, being both single and married, quality

and location of their HWE, and the use of the English language are positive aspects of their Filipino ethnicity that were considered as facilitating factors on their NCLEX-RN experience.

Theme 2: Being Positive

The theme *Being Positive* refers to an individual's affective and behavioral attributes that have positive influences on the NCLEX-RN experience. Three subthemes emerged under this theme: 1) *Mental Preparation*, 2) *Positive Attitude*, and 3) *Critical Thinking*. Table 6 presents the theme, subthemes, and codes related to *Being Positive*.

Table 6. Theme, Subthemes, and Codes of Being Positive

Theme 2	Being Positive		
Subthemes	<i>Mental Preparation</i>	<i>Positive Attitude</i>	<i>Critical Thinking</i>
Codes	Focus Control Self-assessment Taking risk Goal	Motivation Self-confidence Study habits	Critical thinking

Subtheme 1: Mental preparation. *Mental Preparation* is a subtheme that refers to a mentality or belief that positively influences positive behaviors. The participants believed that mental preparation, which they also referred to as mindset, is critical to a positive NCLEX-RN experience. This kind of preparation includes focus, control, discipline, self-assessment, goal setting, taking risk, desire to know more, awareness of deadlines, and willingness to study.

The participants' positive mental preparation influenced their attitudes and behaviors towards their review preparation, producing structure that guided them in

studying. Blue said, “I need to put my myself in a mindset that I need to be successful...The mindset that hmm, the grass is greener on the other side.” JM’s mental preparation was described as, “...discipline and consistency. So in a few months’ time, my environment, my activities, my schedule was very controlled.” This was similarly shared by Yohan, “Yeah, I think the biggest thing for me at least that helped me the preparation was the discipline to keep on studying.”

Focus. Focusing is one critical aspect of mental preparation that the participants consistently mentioned. This involves focusing on various aspects of their NCLEX-RN preparation including, goal, review class, study time, test structure, and self-assessment. They claimed that their ability to focus was largely inspired by their goal and motivation to work in the U.S., availability of time to study, ability to manage distractions, financial implications involved in the NCLEX-RN application process, and presence of a support system. KD emphasized, “...put more attention and time on your preparation during the exam. Because if you will not put time and attention on your review, no, you will not make it during the exam.” Anne made a strong argument on focusing when she mentioned,

The bottom line is no matter how tired you are, if your goal is like to pass the NCLEX and you signed up for it...I think if you’re like determined to do it, you need to set aside a certain time for it. Stop making excuses and you signed up for it, so just do whatever you can.

Control. The participants identified a strong sense of control and discipline as critical in maintaining structure during the NCLEX-RN preparation. This involved the ability to control internal and external variables that may influence their preparation. For

some, this includes controlling the time, environment, resources, and distractions. Angel provided a strong general description of control,

And I really go with that belief that go for the things that you can control. Control it. Like you are the best controller for the things that you can control. And for the things that you can't, let it go because you can't do anything about it. The more you try to hold onto it, it will be more difficult and you can't move on. Focus on those things.

JM, on the other hand, gave a more specific description of control, “So in a few months' time, my environment, my activities, my schedule was very controlled,” referring to his structured schedule at the review center and his decision to live in a boarding house alone to control distractions.

Self-assessment. The participants also used self-assessment as a mental preparation strategy to identify their learning needs, contextual situations, and limitations. Self-assessment strategies resulted in lowering of expectations, restructuring priorities, and redesigning review strategies to address their needs. Samantha shared her self-assessment strategy,

I am organized in terms of studying because I know I'm not that smart and you know, there are people who, when they answer questions they use logic, critical thinking and I am aware of my learning style. You need to know your learning style before you go to the battle.

Similarly, Blue mentioned how self-assessment benefited him, “I learned a lot about myself, you know, managing my time, balancing my work commitments and as well as time I spent for the review and also looking at my scores whether I am improving in my scores.”

Taking risk. This is as a form of mental preparation that helped the participants overcome challenges that were encountered during the review preparation. As Em put it, “You know, face the monster,” referring to the gargantuan task of expecting “everything under the sun” on the exam. Some participants were faced with uncertainties, feelings of being unprepared, and lack of self-confidence on taking the NCLEX-RN. Even with her background as a nursing faculty member, Anne still lacked self-confidence sitting for the exam and said, “But I think the nicest part of it is deciding to just go and then let's see the outcome... it's just like just sign up and then we will go from there,” referring to her hesitancy to take the NCLEX-RN. Jackie described the huge risk that she took because of concerns on her low practice test scores and ATT (Authorization to Test) that was about to expire,

It was below 60% so they recommended that I am not prepared to take the exam but I took the risk. I was so stressed because they were all saying that I should not go. But my ATT was about to expire so I had to take the risk and just go and take it. And it was a pressure for me because I have to prove to them that I can make it.

Nevertheless, they took the risk and took the exam despite their challenges and emerged successful in passing the NCLEX-RN.

Subtheme 2: Positive attitude. This subtheme consists of various positive attitudes such as motivation, study habits, value on education, patience, inspiration, self-affirmation, and self-confidence that contributed to a positive NCLEX-RN experience. Jackie fittingly captured this theme when she said, “...and a positive outlook that you can make it even though you are faced with hardships...it's more of a positive attitude to your review.”

Motivation. The participants' motivation to pass the NCLEX-RN emerged as the most common positive attitude among the participants, which was mainly related to their goals for their families and to the high cost of NCLEX-RN application. As Mac said, "I think it's the family, in my case when I pass the NCLEX it is going to be for my family. So that is my main motivation." They had various ways to motivate themselves. Samantha had a very unique way to motivate herself, "And to motivate me, I put in my room a banner with my name on it, (name), USRN, I'm putting my MAN, I'm putting my RN, BSN to get me motivated."

A positive attitude helped them turn negative situations, such as family problems, people undermining their capabilities to pass the exam, and work-related discrimination, into a positive NCLEX-RN experience by motivating themselves more. Em emotionally shared his unique motivation for passing the NCLEX-RN, "That's why I'm really pushing to work in the U.S. to change my citizenship to change my passport so that I will not feel discrimination when I am going to work back here in the Middle East." Dawood gave a contextually similar but unique perspective on motivation,

It's really difficulty to manage the time, but I guess motivation, because if it is really what I wanted, so it didn't become as a responsibility but like a 'pot of gold at the end of the rainbow'. So it motivates me to work on my dreams.

A positive attitude with the right and strong motivation to pass the NCLEX-RN was tightly related to their overall goal of passing the exam and the perceived benefits and opportunities that the NCLEX-RN provides.

Study habits. Good study habits were consistently identified as a facilitator of a positive NCLEX-RN experience. The participant's positive attitude towards their review contributed to positive test outcomes. Angel described how she incorporated her study time as a habit, "Even if that's just five to 10 questions a day, I make it as a habit. You have to make it a habit that even if it's just a few questions every day that helps." Organization skills helped Samantha develop her study habits, "So I am more into organizing what to do. I planned on what to study for that day." Dawood described how answering questions became a routine study habit,

...it became a habit to me like if every day I do it, it became a habit. It didn't come to me like as a responsibility. It became a habit that I need to do it. If I did not do the 75 items today, I cannot go to sleep.

A sense of conscientiousness about the review process, possessing good organizational skills, and adequate planning were positive attitudes that were necessary to develop good study habits.

Self-confidence. Positive attitude related to self-confidence was likewise perceived as beneficial to the participants' NCLEX-RN experiences. Dawood attributed his self-confidence as a factor in passing his second NCLEX-RN attempt, "For the second time, I'm actually confident. We can boast but I feel confident. I know that I'm hitting the correct answers." This was similarly experienced by Nicole, who shared,

For the second time I was more sure or confident with my answers. Like when I read the question, I now know that this is the answer. Yes. Because after the first take, I know more and better now. That's why I am more confident to answer the questions.

Having a positive sense about one's own test-taking abilities produced a positive attitude that is beneficial in having a positive NCLEX-RN experience.

Subtheme 3: Critical thinking. The participants acknowledged the importance of critical thinking in taking the NCLEX-RN. They attributed the development of their critical thinking skills to their foundation and training in nursing school. Blue stated, "So it helps to have the knowledge base and perhaps baseline critical thinking but the NCLEX is just not about that anymore I think." Angie valued her training in a nursing program that is one of the centers of excellence in nursing education in the Philippines, saying, "...I had very good clinical instructors...They will train you like a nurse who knows how to think...I think it also helped how the clinical instructors trained us."

The theme *Being Positive* described the psychosocial characteristics that promote a positive NCLEX-RN experience. A constructive mindset, positive attitude, and critical thinking were labeled as facilitating factors of an IEN NCLEX-RN experience.

Motivation, focus, self-confidence, and good study habits are essential psychosocial characteristics that may influence a positive NCLEX-RN experience and outcome.

Theme 3: Learning Effectively

Learning Effectively is a theme that describes the participants' use of effective learning strategies and use of resources that facilitated a positive NCLEX-RN experience. Subthemes that were identified under Theme 3 include: 1) *Learning the Right Way* and 2) *Using the Right Resources*. Table 7 shows the theme, subthemes, categories, codes under *Learning Effectively, Subtheme 1*.

Table 7. Theme, Subthemes, and Codes of Learning Effectively, Subtheme 1

Theme 3	Learning Effectively		
Subtheme 1	<i>Learning the Right Way</i>		
Categories	Review Strategies	Time	Avoiding Distraction
Codes	Focus on few resources	Review time	No stress
	Practice tests	Willingness time	No chores
	Online Q&A sessions	Away from family	No social media
	Reading	Time management	No going out
	Systems approach	Time lag	
	Self-review		
	Review center		
	Posters		
	Study test plan		
	Have a concrete plan		
	Notetaking		
	Highlighting		
	Know trends		
	Translating		
	Familiar with U.S. healthcare system		
	Time management		
	Focus on weakness		
	Diagnostic test		
	Performance report		

Subtheme 1: Learning the right way. As a subtheme, *Learning the Right Way* refers to the participants' use of different review strategies, efficient use of time, and ways to avoid distractions during their NCLEX-RN preparation.

Review strategies. The participants used a variety of review strategies to prepare for the NCLEX-RN. These strategies were based on their learning needs and learning styles, on other examinees' strategies, or on structured schedules provided by review centers or templates from NCLEX-RN review books. They used self or independent review, enrolled in a review center, or a used a combination of both types of review.

Nicole shared her helpful review strategies, "I attended up in a review center and I used

several review materials.” Angel, who used the opposite approach, said, “I prepared for almost six months of studying, of self-studying.” Em’s approach involved both enrolling in a review center and self-review and eventually chose a strategy that fit his needs,

I enrolled myself for the first time in a review center...but unfortunately I wasn’t able to attend all the review just because of my work-related schedule...most of them were self-review.

Their preference for self-studying versus enrolling in a review center, or both, was mainly dependent on the availability of review center or availability of time, which was in turn affected by work and family responsibilities.

Additionally, some participants preferred structured reviews while others studied with flexibility. Angie preferred the structure provided by her review center and incorporated her own study routine and said, “I study early in the morning and then I go to my review class.” For Mel, who struggled with childcare issues and needed flexibility to study stated, “Just whenever I have time, usually morning when I wake up at 7:30...in the evening, I have time because my husband comes home after dinner.” The differences in study structure was influenced by their learning styles, study habits, and contextual situations due to work and family.

A major contention among the participants referred to their preference between answering practice test questions or studying nursing concepts. Although most of them did both, the effectiveness of these two approaches were perceived differently. Yohan claimed, “I spent majority of my time actually answering questions...I just focused on answering as much questions as I could,” but JM disagreed, “I don’t believe in answering

practice test will make you successful in NCLEX. Content is very...very...fundamentals is very important...I focused 80% of my time on contents and 20% on practice tests.” Regardless of the preferred review strategy, its usefulness and effectiveness were determined by their individual learning needs and learning styles.

The participants’ learning styles also influenced whether they studied in groups or in isolation. Their study groups were usually composed of friends reviewing together in a review center or studying with colleagues during or after work. Furthermore, their self-assessment of their areas of strengths and weaknesses, as well as their study habits and progress in the review, enabled them to redirect their review strategies when needed. Blue’s strong sense of self-direction was evident when he shared,

I added more to what actually was just what they created. So I expounded more. I just didn't rely on what they gave me, but I really read further to just supplement my knowledge because I felt it was not just enough to, to follow along. It was important to me to really understand deeply.

KC also mentioned how she changed her review strategies to meet her needs,

They rationalized the Kaplan way, and I feel like I wasn’t learning so I had to revert back to what you guys were doing and go back the textbook and understanding what was going on,

referring to the review program that she had in her nursing school when she prepared for the PNLE.

The participants mentioned different creative review strategies that they found effective. These include notetaking, use of sticky notes, posters, and mnemonics. Several quotes to describe these review strategies include:

You have to make it a habit...you have to learn it by heart so the retention will be there (Angel);

I timed myself too so it was the same as the NCLEX. It was the same amount of questions just so that when I'm in the testing center, I am prepared to be there and finish that (KC),

referring to her strategy of answering 265 questions to practice her concentration skills for the maximum possible number of questions that she may encounter on the test.

I'm not forcing myself...to follow my to-do list. I want to do this during my free time, my willingness time (Em);

It works on your advantage because you are able to apply the theory that you are studying into your practice (Mac),

referring to his strategy of deliberately studying NCLEX-RN and correlating it with his patients' cases while working in the emergency department;

So in a way, familiarizing with NCLEX or the U.S. health care system through the NCLEX inspired you more [to study] (King),

referring to recognizing the difference of the NCLEX-RN with their exams in nursing school and in the Philippine nursing licensure exam.

The wide variation in review strategies was primarily related to individual and contextual differences. Additionally, the differences in their educational preparation, work experiences, family situation, learning needs, and availability of time were accounted for determining the most effective way to study for the NCLEX-RN.

Time. Several concepts related to time emerged from the participants' responses. These included review schedule, immediacy, time lag, and time management. In this study, *review schedule* is defined as the duration allotted to review for the NCLEX-RN and blocks of time that IEN used to study efficiently. *Immediacy*, as a concept of time, refers to the sense of urgency to study that is triggered by certain factors, such as closeness to the time of the examination or the approval or availability of the Authorization to Test (ATT), which is a document that allows and prompts an examinee to schedule the NCLEX-RN exam. *Time lag* is the interval between graduation from nursing and taking the NCLEX-RN.

Time had a very critical and contrasting influence on the participants' NCLEX-RN preparations. Review schedules differed among individual participants. Some participants' review schedules were less than 2 months while some took several months to a year to prepare for the NCLEX-RN. The differences in review schedule were related to employment status, family responsibilities, and processing time of their NCLEX-RN application. JM described his preparation as, "I can say it was a long process for me, for the review and the entire NCLEX journey is about, probably it took me 9 months, 6 to 9 months," referring to his three-month enrollment in a review center and six months of self-review. In contrast, Anne spent shorter time preparing for her exam,

I think it is like 6 to 8 weeks. I was working and studying at the same time so right after work I make sure that I will spend like one to two hours per day to study. And then most of the time Saturday and Sunday eve it's like four to six hours.

Both of them passed the NCLEX-RN the first-time at 75 questions. Their experiences point to the quality of having a defined review schedule, with more focus and dedication and less distractions, that influenced their NCLEX-RN outcome rather than the length of time allotted to studying.

As specific blocks of time were used in studying, review schedules varied from early morning hours, evenings, days off from work, weekends, break time at work, waiting time, or travel time to and from work. Recognizing their individual learning styles and learning needs, some participants followed either a strict self-made, review center-based, or computer software-developed schedule, while some studied depending on the availability of time or use of willingness time. The term *willingness time* was coined by Em to refer to his deliberate plan to study based on his motivation and disposition, rather than studying out of necessity. As he described it,

I call it *willingness time* because you are willing to read, you're willing to answer questions. You will be able to absorb the information better as compared to have a structured time or structured schedule that you have to do this in certain time or you have to study a certain chapter.

Failing on his first NCLEX-RN attempt, restructuring his approach to include willingness time as his main review schedule tremendously helped him as he successfully completed the second NCLEX-RN attempt with 75 questions.

Interestingly, immediacy related to some participant's ATT approval served as a catalyst in their time line to study for the NCLEX-RN. Regardless of the allotted time that they had initially planned, they felt a sense of urgency once they learned of their ATT approval or availability. Their preparation drastically shifted from being relaxed and

complacent to increasing the number of hours spent on studying, supplementing the amount of review material they needed to study, or adding the number of NCLEX-RN practice questions they needed to answer. Mac recalled, “When my ATT came in in July 2019, I really studied and focused for the next three months, and then I booked my exam for October 2019.” This focused review triggered by immediacy helped him pass the NCLEX-RN on his first attempt, completing only 75 questions.

Time lag had an influence on their NCLEX-RN preparation and outcomes. Comparing the time lag between those who passed the NCLEX-RN the first-time and those who failed on their first attempt, the former had an average time lag of 4.4 years while the latter had an average time lag of 10.4 years. Among the first-time NCLEX-RN passers, six of the participants had a time lag of one year while two participants had a time lag of two years. Because the number of participants is small these averages cannot show anything conclusive, they are suggestive of the possibility that a shorter time lag had a more positive influence on the NCLEX-RN outcomes of IEN in this group. Ricky attested to the benefit of a one-year time lag provided when preparing for the NCLEX-RN,

...because it (PNLE) was still fresh and uh it was a comprehensive review, the review was cover to cover. Actually, to be honest, those that were reviewed in the local board, I was able to use them more for the NCLEX compared to the local board.

Ricky was referring to the PNLE review that she had right after graduating from nursing school.

Avoiding distractions. The ability to manage distractions is another category for the subtheme, *Learning the Right Way*. The participants used a variety of approaches to reduce or eliminate distractions that they felt might hamper their NCLEX-RN preparations. These approaches included both physical and psychological interventions.

Physical interventions included isolating themselves in a boarding house, dormitory or a condo while reviewing, shutting down social media, and refusing to go out with peers. Angel shared self-isolation as a way to manage distractions, “I really isolated myself. I rented a condo that I had the room all by myself. I didn't go see...it's like a self-sacrifice. I didn't go to the mall. I only go down with grocery, back again to my room,” which was a strategy similarly practiced by Jackie, “Six weeks, I remember six weeks focus before the date, I don't go out with my friends.” KD coined the term *Facebook fasting* to her approach in reducing distractions, as she shared, “No TV, no Facebook. I had Facebook fasting. I had no social media, everything was closed.” This was akin to Pong’s strategy as she said, “The peak of my review was when I shut down my social media for six months before I took the exam.”

On the other hand, psychological interventions consisted of self and parental discipline, focusing, and suppression of unpleasant thoughts or events. Yohan, who claimed that being young, friendly, and out of college caused him distractions, said, “...the discipline of my parents and just to be focused on my goal. Yeah, those are the strategies that I did to overcome those distractions.” Samantha’s approach involved suppressing distractors,

If you have family problems in the Philippines, like finances and stuff, when you take the exam, you just need to redirect yourself and focus on your goal until you achieve the goal and then you will deal with it afterwards.

The participants' ability to effectively manage distractions, to efficiently use their time despite their work and family commitments, and to identify review strategies that address their learning needs were critical in *Learning the Right Way* as they prepared for the NCLEX-RN.

Subtheme 2: Using the right resources. *Using the Right Resources* is a subtheme that describes the participant's support system, review resources, finances, environment, and healthy lifestyle that helped facilitate a positive NCLEX-RN preparatory experience. Table 8 shows the theme, subthemes, categories, codes under *Learning Effectively, Subtheme 2*.

Table 8. Theme, Subthemes, and Codes of Learning Effectively, Subtheme 2

Theme 4		Learning Effectively			
Subtheme 2		<i>Using the Right Resources</i>			
Categories	Review resources	Support System	Finances	Environment	Healthy Lifestyle
Codes	Online resources	Family	Financial support	Study space	Food
	NCLEX books	Relatives	Financial preparation	Testing site	Exercise
	Textbooks	Friends		International testing	Sleep
	School notes	Colleagues			
	PNLE notes	Spouse			
	Multimedia	Online			

Support system. The presence of a good and strong support system was the most prevalent subtheme of *Using the Right Resources* that was reported to have a positive

influence on the participants' NCLEX-RN experience. Support systems consisted of psychological, emotional, or financial support from immediate family members, spouse, relatives, friends, colleagues, or online support groups. Among these groups, the family support system was the most common source of support. Blue acknowledged the significant contribution of his support system to his success as he recalled, "...enough support from friends and family, that's also very important because this journey, you can't do this alone."

The type of support came in various forms, including financial support, encouragement, physical assistance, advice, or sharing experiences and resources. The high cost of applying for the NCLEX-RN requirements can be very expensive for an IEN. Blue shared, "...that would be a huge obstacle for me had I not have the financial support...I would not be able to take the NCLEX at all." The participants reported that it is imperative for family members to understand the physical and psychological requirements needed to prepare for the NCLEX-RN. JM emphasized that there is more to financial support, "...it is very important that they need to understand the situation."

Family members and spouses often provided transportation to and from the home to the review center throughout the preparation, supporting decisions to resign from jobs in order to focus on the review, providing for financial needs while being unemployed, and not allowing them to do household chores during their review preparation. As Angie shared, "My parents, my family because they just let me focus and study. They were very supportive with what I do...It was OK if I do not do household chores." Likewise, spouses were willing to take care of children while individuals focused on studying for

the exam. Angel mentioned that she left her two kids with her husband in Riyadh (Saudi Arabia) when she went to the Philippines to take the NCLEX-RN, “the good thing, my husband is so supportive and said, ‘No, you have to be alone I that makes you more comfortable.” Moreover, some of the spouses travelled with them when they took the NCLEX-RN exam in a different country. For some participants, their parents were more eager to initiate their NCLEX-RN preparation than themselves.

Other than immediate family members, the participants’ relatives also provided support in the form of encouragement and financial support, while friends and colleagues who also prepared for the NCLEX-RN at the same time became a study group. Anne recalled, “...we did form a small group in my old job so the three of us study together. That helps, too.” Colleagues served as a support group as participants tried to study at work. Mac shared his unique study strategy,

If there are concepts that I do not understand or if it is hard for me to retain that information, I share with them or I ask questions...if I am able to explain to them, I will be able to retain more information and understand the theory or the management of that disease process.

For participants who sat for the exam in the mid-2000s when there was lack of NCLEX-RN resources that were available online, friends and colleagues who had undergone the NCLEX-RN application and examination served as sources of information. The participants acknowledged the critical role of the internet in searching for online resources that are relevant to NCLEX-RN preparation. Facebook groups, internet blogs, and online chatrooms became social media platforms to share ideas and

resources. Jan shared how online support system helped her during her NCLEX-RN preparation,

So what I really did was to research on what are the common books, the testimonies of those who passed to find out what resources or books they used in studying and also to find out what are they are study habits...I also tried to look for groups from the U.S. to know what are their preparations and to know the actual practice in the clinical setting...We have a group chat and every week we communicate and share resources.

Review resources. The participants used a variety of print (NCLEX-RN review books, nursing textbooks, and notes from nursing school and previous licensure exam review), multimedia (CD-ROM, audio, and recorded lecture), and online resources (Facebook groups, YouTube, blogs, phone applications, and subscriptions from review providers). The choice of review resources was contingent on learning preferences, learning needs, trends in the NCLEX-RN, financial resources, and availability of internet access and online resources. As Mel, who had a time lag of 10 years prior to taking the NCLEX-RN, said, “I have limited resources, I feel like I need more lecture to refresh my memory.”

Online review materials were scarce to those who prepared for the NCLEX-RN in the early 2000s. The participants who sat for the exam during that time relied on print resources and recorded lectures that were viewed at the review centers. A multitude of online NCLEX-RN review resources that are either free or paid by subscription were developed in recent years, making these resources more accessible to the participants. Nevertheless, the slow internet access in the Philippines was a concern for one participant.

The internet and various social media platforms provided avenues for the participants to search for online review resources that suited their learning needs and financial resources. Among the notable online resources were UWorld, NCSBN Learning Extension, Facebook groups such as Lefora Filipino Nurses to the U.S. and Nursing Review, and various YouTube videos. Em mentioned how an online resource helped him pass the NCLEX-RN on his second attempt,

Then for the second time, since I already know what the real NCLEX does, I purchased UWorld again and I answered the questions and read the rationales because it gives you updated concepts and questions that the NCLEX is probably going to ask you.

Jan also shared how online resources helped her, “I learned a lot of information from those online services and specially in your group, the Nursing Review, I learned a lot from those questions,” referring to the researcher’s online NCLEX-RN review group on Facebook.

Among the print review resources, NCLEX-RN review books such as Lippincott, Mosby, and LaCharity were most commonly mentioned by the participants. JM recalled on one particular resource that he found very helpful, “...when I was reviewing the book, it was a very good book, very concise and systematic book by Linda Silvestri, it helped me further absorb especially the medical-surgical topics in my brain.”

Furthermore, the amount and type of resources had different influences on the participants’ NCLEX-RN experiences. Most participants used a combination of print and online review resources. For some, fewer number of books was more effective but can be limiting for others. KD expressed it as,

and you have a lot of resources, you don't know which one to use first... Each resource will give you different information. But if you focus on one main thing, your focus is there. Just keep on repeating it, repetition. That's all I used.

Review centers also provided an invaluable resource for NCLEX-RN preparation although its availability was an issue for some participants. Yohan attested to the proliferation of review centers, "...a lot of these reviews center started popping up left and right. This was a very popular way to go in terms of review study for the NCLEX." These centers provided additional resources to supplement their learning needs. Jackie shared, "...the review center, it coached me on concepts that I do not understand." For Nicole, studying at a review center helped her pass the NCLEX-RN on her second attempt. She stated, "Ah the second time I attended a review center I was already at the U.S. that time."

The use of varied review materials such as print and online resources or a review center enabled the participants to meet their learning needs. The choice of an appropriate review resource primarily depended on the availability of these resources, self-assessed needs, finances, and contextual situations.

Finances. The NCLEX-RN application process is very costly and having adequate finances can promote a positive NCLEX-RN experience. The participants devised ways to meet this financial need to support their application process. For some, this involved producing the money themselves through their own finances. For the majority, it involved financial support from family members and relatives. In the case of Blue, he shared, "...had I not have that financial support (from family and relatives), you know, I would not be able to take the NCLEX at all."

For a few, borrowing loans and paying an agency to process the application through an installment basis helped in easing the financial burden brought about by the application process. Angel, married with two kids, shared, alluding to her need to spend two weeks in Manila alone in a condo in order to have more time and focus studying before her exam expressed,

We even got to the point that we had to borrow money so that I will be comfortable during this time. My husband asked for a loan so that at least we can stretch our budget and make me feel comfortable.

The presence of adequate finances is critical to the participants' application process because the lack of it causes anxiety that interferes with their review preparation. As Pong reported, "If you are not financially prepared, chances are you will be stressed on the NCLEX. So you need to prepare financially as well because I think NCLEX is very expensive for us nurses."

Environment. The participants identified a study space that is accessible, comfortable, and conducive to study as a facilitating factor on their NCLEX-RN experiences. This study space can be the review center, their residence, a boarding house, or dormitory. JM considered study space as a major factor for a positive NCLEX-RN experience. Although the two-hour commute between the review center and his lodging was a logistical problem, the quality of those study spaces offset the issue on accessibility. He said,

...study space is very important also, a study space that is conducive. I was living in a boarding house alone so there was no distraction... Location, location,

location of the review center or your study workplace...So I believe that's one important thing to consider, location of your study place or review center.

Or, it can also be the closest Starbucks. As Anne said, "I should be in Starbucks (laughs)...I never wanted to review at home because I will see my chores or the bed, so I feel like sleeping. So it's better for me to be, like, somewhere." By considering their study space, JM and Anne felt this helped them both pass the NCLEX-RN on their first attempt, with 75 questions only.

Finding a comfortable place to study could also mean travelling hundreds of miles to another part of the country. Living in Iloilo, a province in one of the major islands in the middle of the Philippines, Jackie had to travel almost 600 miles to Baguio City for a one-month review for the NCLEX-RN. Putting this in perspective, the travel would entail taking a one-hour flight or 24-hour sea travel from Iloilo to Manila and another eight-hour bus ride from Manila to Baguio City. Jackie shared, "I went to review to the most comfortable place to review. I had to go to the summer capital, Baguio City. I think that is the most comfortable for me to review," referring to the cold climate in that city. In addition, Jackie also spent another six weeks outside her home for self-review, "Yes, I left the house. I went to a dormitory. Just like with the review center, I had to leave the house for the moment just to review." Choosing a conducive study place was perceived as a definite factor in helping her since she passed the NCLEX-RN on the first attempt.

Considering the geographical availability and variability of international NCLEX-RN testing locations, the environment in the testing center can have a positive or a negative influence on the NCLEX-RN experience. For instance, with the lack of an

NCLEX-RN testing site in the Middle East, IEN from this region have to go to Germany or India to take the NCLEX-RN. As such, the testing site itself, the city, or the country can have an influence on the NCLEX-RN experience of an IEN. According to Dawood, who took the NCLEX-RN in India, “I think the (testing) environment helps...because it is a controlled area, secure, and at the same time it is conducive for the battlefield. It is conducive for the exam.”

Healthy lifestyle. A healthy lifestyle is considered as a facilitating factor in the participants’ NCLEX-RN experience. Having a life-work balance that included regular exercise, relaxation time at the spa or salon, eating a balanced diet, or simply having time to pause and relax while studying, such as watching TV, browsing on Facebook, or listening to music were healthy lifestyle practices that contributed to positive NCLEX-RN experiences. Anne’s study routine included, “Drinking my coffee, something like around 3:00 to 5:00 PM,” while Jackie claimed that “...I exercise, at the same time, a balanced diet.” Breaks in between long study hours helped build Samantha’s concentration and focus to answer 200 NCLEX-RN practice questions every day. She reported,

What I do for the first 50 questions, I answer them, I study the answers and read the rationales, understand. After the 50, I set my goal. I need to drink. I need to eat...I set my goal, like, after 50 questions, I need to get up, I need to watch TV, be on Facebook, or eat something sweet. Yeah, it helped me refresh my mind because there is a lot of information and my mind cannot accommodate it anymore.

Under the subtheme, *Using the Right Resources*, the presence of a strong support system, adequate finances, conducive study spaces and testing environments, and maintaining a

healthy lifestyle were identified as facilitating factors that helped IEN make the NCLEX-RN preparatory experiences positive.

Theme 4: Training as a Global Nurse

The theme *Training as a Global Nurse* represents the academic factors that the participants found helpful in their NCLEX-RN experience. This theme consists of descriptions about their experiences as nursing students focusing on the nursing curriculum, quality of nursing schools and nursing programs, faculty members, quality of didactic and clinical instruction, and nursing courses that were believed to have a positive influence on the NCLEX-RN. Moreover, the presence of advanced nursing degree and its influence on the NCLEX-RN experience was also explored. The subthemes under *Training as a Global Nurse* are 1) *Philippine Nursing Education*; 2) *Advanced Nursing Degree*; and 3) *Areas of Strengths*. Table 9 displays the theme, subthemes, and codes related to *Training as a Global Nurse*.

Table 9. Theme, Subthemes, and Codes of Training as a Global Nurse

Theme 4	Training as a Global Nurse		
Subthemes	<i>Philippine Nursing Education</i>	<i>Advance Nursing Degree</i>	<i>Areas of Strength</i>
Codes	Foundational knowledge	MAN*	Medical-surgical nursing
	Faculty	MSN**	Pharmacology
	Students		Pathophysiology
	Clinical experiences		Fundamentals of nursing
	Quality of program		Psychiatric nursing
	Quality of nursing school		Pediatric nursing
	Teaching strategies		Prioritization
	Language		Delegation

Note: *Master of Arts in Nursing; **Master of Science in Nursing

Subtheme 1: Philippine nursing education. The participants had contrasting perspectives on the influence of their baccalaureate nursing education in the Philippines on their NCLEX-RN preparation. They believe that Philippine nursing education plays a role in the NCLEX-RN outcome of Philippine-educated nurses. They reported that the nursing curriculum in the Philippines is comparable to the U.S. nursing curriculum, as evidenced by the credential equivalency evaluation provided by the CGFNS for international nursing graduates who intend to apply for the NCLEX-RN exam, U.S. nursing license, and work and/or immigrant visas. JM reported, "...being Filipino educated nurses, there might be some correlation with the failure or success of the NCLEX exam because... the Philippine nursing curriculum is at par with the U.S. nursing curriculum." Despite the similarities between the U.S. and Philippine nursing curricula, it is inevitable to have differences in focus and content that are specific and relevant to the population being served. As JR said, "If there were any contextual differences, it would be very minimal because we use U.S. textbooks in the Philippines."

The participants believe that nursing education that is characterized by a quality nursing program, good nursing schools with high standards and strict academic policies, competent faculty members, and relevant clinical experiences as nursing students, is a crucial facilitating factor for their NCLEX-RN experience. Anne recalled her experiences as a nursing student in the Philippines,

I learned a lot not only in theory but also in practice. When I was sitting in there (taking the NCLEX-RN), I was like, "Oh I got this, this was discussed." And then there is like a parallelism on how this concept is being applied to the clinical area. Clinical educators in the Philippines are very fond of doing that. They will not

only discuss to you like the concept based on the book, but how it will get it applied in the clinical area.

In addition, they reported that their U.S.-authored nursing textbooks were the exact same textbooks used in U.S. nursing schools and the use of English as the medium of instruction in all levels of education in the Philippines were recognized as facilitating factors that helped them in the NCLEX-RN exam.

The Philippine nursing curriculum provided a good foundation for basic nursing knowledge, which was contributory to positive NCLEX-RN outcomes. As Samantha reported, "...yes, it contributed a lot because it is a factor to have a good foundation, a good education." Yohan affirmed the crucial role of foundational knowledge, "...in hindsight I think the undergrad program actually helped me a lot in my preparation for the NCLEX." However, it was recognized that core nursing concepts are not enough to successfully pass the NCLEX-RN. There are gaps that need to be addressed to make Philippine nursing graduates more globally competitive. Blue expressed his thoughts about the adequacy of the Philippine nursing curriculum, "I think at that time it's sufficient but at the same time, I think it's sufficient enough but I think there are many opportunities to improve the level of education in terms of making our graduates more competitive internationally."

The influence of the NCLEX-RN was evident in some of the nursing programs in the Philippines. NCLEX-RN was emphasized in the lectures during their nursing programs even though they were not required to take the NCLEX-RN. JR shared,

NCLEX is part and parcel of every nursing student. Even in the lecture days, they will always say, ‘This may come out in the NCLEX. You need to listen to this because it may not only come out in the boards (PNLE), but it may also be on the NCLEX’. So even as a student, they have inculcated that the concepts are important not only for the boards (PNLE) but also for the NCLEX.

The participants further recalled how the NCLEX-RN drove the content of nursing lectures and classroom nursing examinations when in nursing school, especially for nursing schools that were identified as intentionally training their graduates for the U.S. Several participants believed that the structure of the NCLEX-RN is so important to Philippine nursing education that it should serve as a template for the nursing curriculum. Furthermore, with the advent of Next Generation NCLEX-RN (NGN), one participant mentioned that this new NCLEX-RN structure can serve as a basis for designing teaching strategies and test questions in teaching nursing in the Philippines. JR, who was a post-doctoral fellow at the time of the interview, shared this insight about the impact of NCLEX-RN on Philippine nursing education,

Actually, for me, NCLEX has an influence on how the nursing curriculum should be made in the Philippines. It serves like a template. Whatever happens to NCLEX in the future, like with the next generation testing, it would eventually affect how it is taught in the Philippines... By the way how the breakdown of concepts in the NCLEX would eventually affect how nursing is taught in the Philippines. That's how important NCLEX is. The structure.

Subtheme 2: Advanced nursing degree. *Advanced Nursing Degree* refers to having a master’s degree, Master of Arts in Nursing or Master of Science in Nursing, during the preparation and at the time of the NCLEX-RN exam. Five of the participants had a master’s degree in nursing when they took the NCLEX-RN exam for the first-time

and three of them reported that this degree helped them pass the exam. Those with master's degree in nursing administration claimed that management concepts helped them in answering prioritization and delegation questions. In addition, an advanced nursing degree helped in organizing their review during preparation. Samantha, who has a Master of Science in Nursing (major in Nursing Administration) degree, replied, "Yes, especially the management concepts. Yes, I know for prioritization...because I am more into nursing administration. And it also helped me with my organization on how to focus on what to study for the NCLEX." Having a master's degree in psychiatric nursing was an advantage in answering psychosocial integrity questions on the NCLEX-RN exam.

On the other hand, in the case of two participants with advanced nursing degrees, having a master's degree does not necessarily equate to having enough self-confidence to take the NCLEX-RN. As Pong stated,

So I didn't consider that having a Masters will give me that confidence to pass the NCLEX. I just relied on my notes from my Masters and I used them during my preparation. But I never thought that my Masters and thesis that I did will help me with what I, I'm gonna do.

The participants had different perspectives on the influence of possessing an advanced nursing degree on their NCLEX-RN outcomes. While most of them claimed that the degree benefited them, others believed that it helped them in understanding the advanced concepts but not on the overall NCLEX-RN outcome.

Subtheme 3: Areas of strengths. Based on their self-assessment, NCLEX-RN performance reports, and recall of their NCLEX-RN testing experience, the participants

provided information on nursing content areas, topics, NCLEX-RN categories of clients, or type of questions that they considered as their strengths or those that were perceived as easy. Thus, the subtheme, *Areas of Strengths*.

The participants had varying responses on their areas of strengths. Some reported that medical-surgical nursing (nursing course) or Physiologic Adaptation (an NCLEX-RN category of client needs) was an area of strength, particularly on the areas of management of neurologic, cardiovascular, and renal disorders (topics). As Pong said, “I was lucky that I had a lot of med-surg questions that were thrown to me during that time.” A few participants considered management of care (an NCLEX-RN category of client needs), specifically on the topics of delegation on prioritization, as an area of strength. Other courses that were less commonly identified as areas of strengths include pharmacology, pathophysiology, fundamentals of nursing, psychiatric of nursing, and pediatric nursing.

Under this theme, *Training as a Global Nurse*, the participants acknowledged their nursing education in the Philippines as contributory to the development of foundational nursing concepts that were needed for the NCLEX-RN. A quality nursing program with competent nursing faculty is crucial to the development of basic nursing knowledge. Completion of a master’s degree in nursing was also found to positively influence NCLEX-RN experience of IEN. Certain nursing courses, particularly medical-surgical nursing, were identified as contributing to a positive NCLEX-RN experience and outcome.

Theme 5: Regulating Nursing Practice

The theme *Regulating Nursing Practice* refers to the structure and processes involved in regulating nursing practice such as licensure examinations and other requirements needed for the NCLEX-RN. There are three subthemes under this theme: 1) *Licensure Examinations*; 2) *NCLEX-RN Application Process*; and 3) *Regulatory Requirements*. Table 10 displays the theme, subthemes, and codes related to *Regulating Nursing Practice*.

Table 10. Theme, Subthemes, and Codes of Regulating Nursing Practice

Theme 5	Regulating Nursing Practice		
Subthemes	<i>Licensure Examinations</i>	<i>NCLEX-RN Application Process</i>	<i>Regulatory Requirements</i>
Codes	PNLE* HAAD**	NCLEX-RN application Cost	CGFNS*** English proficiency exams

Note: *Philippine nurse licensure examination; **Health Authority Abu Dhabi (United Arab Emirates); ***Commission on Graduates of Foreign Nursing Schools

Subtheme 1: Licensure examinations. The participants' experiences with the PNLE was the main subtheme that influenced their NCLEX-RN preparation. They acknowledged the differences in content and structure between the PNLE and the NCLEX-RN, however, they had opposing views on the PNLE. Most of the participants mentioned that the PNLE review was a facilitating factor on NCLEX-RN preparation. Anne reported, "It (PNLE review) is very helpful because the preparation for the NLE (PNLE) is very extensive... I feel like the preparation for the Philippine board examination is more comprehensive than the NCLEX, based on their test focus." This was corroborated by KC, "That was very helpful because the NLE (PNLE) was a lot

more comprehensive. I was able to like take lessons that you guys had done and then make understand them for the NCLEX,” alluding to her PNLE review class where the researcher was one of the main review lecturers. Other participants further mentioned that the comprehensiveness of the PNLE review make it a good preparation for the NCLEX-RN.

Subtheme 2: NCLEX-RN application process. While most participants found that the application process for the NCLEX-RN is a negative experience, a few reported having a positive experience on this process. The positive experience was attributed to the assistance provided by an overseas employment agency, a processing agency, or as a service provided by review centers to their enrolled reviewees. As Angie recalled, “it wasn't stressful to do the application, like the paper works because the review center does that one for us.” Although the agencies charge expensively, the agency’s services helped Angel in a different but positive way when they processed her NCLEX-RN application, “...good thing and I am happy that with my generation, there’s installment (laughs). So that installment payment is really a great help.”

Subtheme 3: Regulatory requirements. This subtheme refers to the requirements for NCLEX-RN eligibility, which includes CGFNS certification exam (CEEx) or credentials evaluation (CEv) and English proficiency examinations. Only one participant sat for the CGFNS CE and she claimed that her preparation for the CGFNS CEEx was helpful when she sat for the NCLEX-RN. Although this was the only case to represent this subtheme, its significance as a requirement for NCLEX-RN eligibility makes it worth including as a subtheme.

Theme 6: Living in a Bigger World

The theme *Living in a Bigger World* describes the presence of social, economic, legal, or political factors that have either direct or indirect impact of the IEN NCLEX-RN experiences. These factors include economic situations, social environments, and legislations on immigration. The three subthemes are: 1) *Economics*; 2) *Socio-cultural*; and 3) *Immigration*. Table 11 displays the theme, subthemes, and codes related to *Living in a Bigger World*.

Table 11. Theme, Subthemes, and Codes of Living in a Bigger World

Theme 6	Living in a Bigger World		
Subthemes	<i>Economics</i>	<i>Socio-cultural</i>	<i>Immigration</i>
Codes	Living conditions Job security Family	Discrimination Cultural restrictions	Immigration policy Hiring of IEN in the U.S.

Subtheme 1: Economics. Economic factors in the Philippines and internationally such as living conditions, job security, and regional economic situation, became strong motivating factors for IEN to focus on their NCLEX-RN preparation. For a few, finance was not an issue, but for the majority, financial and economic situation was a major concern. Mel stated, "...financial support, that's no problem with that. I can avail of any review materials I want...So I can say I can purchase anything I need." However, more participants had experiences similar to Angel, "...budget wise, I really have to be strict with how to handle finances."

The participants wanted to work, live, and settle permanently in the U.S. This desire was mainly influenced by their past and/or current economic situations in the

Philippines and internationally and by the perceived economic benefits of working as a nurse in the U.S. They viewed the NCLEX-RN as a means to create a better future for themselves and their families. Samantha said,

So that factor that I had to look at my goal, career, and my family pushes me to take the exam because...I looked for a country where I can live and work permanently. In the Middle East you cannot do that. I cannot go back to the Philippines because...I cannot sustain the needs of my family. So that's the first factor why I chose to take the NCLEX.

Dawood shared a similar experience, "I don't see myself working as a nurse in other countries but because of the (economic) crisis I feel like I need to take steps to be permanent as a nurse like in U.S." Pong agreed,

But what made me prepare for the U.S. because I am not going to stay in the Middle East for good because this is not going to be my life. It's like there is no assurance about the future. So I think the U.S. will provide better.

The participants consistently expressed the influence of economic factors across different themes because it is a central theme to their purpose of taking the NCLEX-RN. From their backgrounds, work situations, and goals, this subtheme is relevant in understanding the participants' NCLEX-RN experiences. By focusing on the economic benefits of passing the NCLEX-RN, this has become a major goal and a strong motivating factor on their NCLEX-RN journey.

Subtheme 2: Socio-cultural. Social and cultural differences became the catalyst for some participants to apply for the NCLEX-RN. Em's positive and negative experiences in Abu Dhabi (UAE) motivated him to pass the test. As a positive experience, Em said, "...the nurses from the Philippines if they want to work in the

Middle East, especially here in Abu Dhabi, they won't have a hard time having the HAAD because you are already an NCLEX passer," referring to the exemption to take the Health Authority of Abu Dhabi (HAAD) exam as UAE's licensure exam to practice nursing. Em's negative experience similarly provided him a strong determination to take the NCLEX-RN,

I've been working in the Middle East for more than five years, but I saw discrimination of having a Philippine passport or Asian passport holder than those Western passport holders. That's why I am really pushing to work in the U.S.

Pong shared how NCLEX-RN is viewed from a Middle Eastern nursing culture's perspective which served as one of her motivations to sit for the exam while working in Qatar, "Here, if you are an NCLEX passer, you have a different caliber among the nurses. People look at you differently." Additionally, restrictions imposed by social and cultural norms in the Middle East paved the way for married participants to apply for the NCLEX-RN. Angel, who is married with kids, expressed her concerns about her kids' future,

Here in Saudi Arabia, they just stay at home. They cannot go out and play the normal things, not like the kids in the Philippines. So, I can really see them enjoying more life with work and balance if they are in the U.S.

Like economics, the participants' socio-cultural experiences in the Philippines and internationally helped shaped their aspirations and redirected their priorities. Their desire to provide a healthier social and cultural environment for their kids and for their own

careers enabled them to perceive the NCLEX-RN as a stepping stone to achieve this goal.

Thus, it became a powerful motivation to pass the NCLEX-RN.

Subtheme 3: Immigration. The participants identified the issue of the U.S. immigration policy regarding the hiring of IEN and how this policy influenced their decision and motivation to take the NCLEX-RN. Dawood, who graduated in 2006 and had minimal opportunities to migrate to the U.S. after graduation due to the visa retrogression for nurses, sought employment in the Middle East. He recently considered the U.S. as his permanent destination and prepared for the NCLEX-RN in 2018. He said,

Although I already know how much salary in the USA nurse earns and all the privileges, I don't know, that didn't motivate me the earliest time. Maybe because of the immigration issues. But lately because of what happened, the motivation increased, if I may say.

Angie alluded to the impact of immigration when she said, “For me, that was good because during that time nursing was booming, there was a lot of hiring for the U.S.” The participants consider the availability of U.S. nursing job opportunities and employment-based visas or working visas for IEN as a major determinant for taking the NCLEX-RN.

As a summary response to Research Question 2, the participants provided rich and thick data, clustered into six themes that described the facilitating factors that they experienced when they prepared for the NCLEX-RN. Theme 1, *Being Filipino*, described their ethnicity as Filipino, with their unique traits and family-centeredness, and their culture of labor migration as a global nurse. Theme 2, *Being Positive*, presented the influence of mental preparation, positive attitude, and critical thinking on their NCLEX-RN experiences. Central to the concepts of testing, Theme 4, *Learning Effectively*,

identified the role of effective studying and adequate resources while Theme 4, *Training as a Global Nurse*, acknowledged the influence of their nursing education in the Philippines, possession of an advanced nursing degree, and nursing courses on their overall NCLEX-RN experiences and outcomes. On a broader scale, Theme 5, *Regulating Nursing Practice*, recognized the role of licensure examinations, the NCLEX-RN application process, and regulatory requirements in facilitating the NCLEX-RN experience. Lastly, Theme 8, *Living in a Bigger World* addresses the influence of economic and socio-cultural factors as well as immigration policies and their impact on the participants' NCLEX-RN experiences. The integration of these internal and external factors directly and indirectly provided positive NCLEX-RN experiences to the participants, which can promote an insight in understanding the factors affecting the NCLEX-RN experience of IEN.

Research Question 3: What are the hindering factors that IEN experienced while preparing for the NCLEX-RN?

Six themes described the hindering factors of the participants' NCLEX-RN experiences and these include: 1) *Being Filipino*; 2) *Being Overwhelmed*; 3) *Training as a Global Nurse*; 4) *Ineffective Learning*; 5) *Regulating Nursing Practice*; and 6) *Living in a Bigger World*. Due to the conceptual equivalence of the majority of the hindering and facilitating factors, four of these themes were labeled similarly (Themes 1, 3, 5, and 6). The difference on two themes, Theme 2, *Being Overwhelmed* and Theme 4, *Ineffective Learning* lies on the subthemes.

Theme 1: Being Filipino

There are two subthemes that were considered as hindering factors under the theme *Being Filipino*: 1) *Filipino Traits* and 2) *The Global Nurse*. Table 12 displays the theme, subthemes, and codes related to *Being Filipino*.

Table 12. Theme, Subthemes, and Codes of Being Filipino

Theme 1	Being Filipino	
Subthemes	<i>Filipino Traits</i>	<i>The Global Nurse</i>
Codes	Mañana habit or procrastination Age as a developmental factor Family-centeredness Language	Healthcare work experiences

Subtheme 1: Filipino traits. The participants mentioned Filipino traits such as procrastination and negative traits related to age as factors that hindered their NCLEX-RN experiences. Although family-centeredness and language were initially presented as facilitating factors, some participants regarded these as hindering factors.

The mañana habit or procrastination. For some participants, the long process of NCLEX-RN application might have provided adequate time to prepare for the NCLEX-RN but for some, it reinforced the Filipino trait, mañana habit or procrastination. Mañana is a Spanish word which means *morning*. Mañana habit, which literally means a habit of delaying something for the next day, is one of the negative Filipino attitudes that is historically attributed to the Spaniards' colonization of the Philippines. Some participants waited until their ATT was approved or available before focusing on their review. As Samantha described,

I am cramming because even I was given a year to review because I started the processing of my application that time, but it was hard because I had a lot of responsibilities...So what I did for that one year I was not really focused on my studies. It's like oh I need to study because I am taking the exam that's for eight months. But when my ATT arrived, on the first day I had to finish answering 70 questions per day on these questions.

Dawood shared this similar trait,

It took me six months, I really had difficulty. In that time, I still had difficulty so I have the attitude like relax time, just chill, don't focus first. Until the eligibility is there, no focus. Then when I received my eligibility after seven months from NMI (Northern Marianas Islands), that's the time I can say I focused on my way until I took the exam.

Nicole further added,

I had a family to attend to that time why I wasn't able to have a full time to study. I think I only gave myself two weeks to study full-time before I took the test the first time. But it was not that intense. It was not that focused.

From their descriptions, it appears participants had awareness of the length of time available to study but they became complacent because of the lack of urgency to study and distractions due to family and work responsibilities.

Age as a developmental factor. Some participants regarded advanced age as a deterrent to studying for the NCLEX-RN. Reduced attention span and difficulty with memorization were identified as reasons that negatively impacted their review. Nicole said, “At my age, at 41, it’s hard to study. Honestly, I’m 41. I believe that the younger ones have better memory,” while Em casually admitted, “I think I am old enough (chuckles) to be in a review center. I feel like that. (Laughs). I feel old...and my attention span is very slow, so I will sleep (laughs).”

Conversely, being young and fresh out of college was also a deterrent for some participants' lack of focus, prioritization, and self-discipline to study for the NCLEX-RN. As Yohan revealed,

My personal obstacles at least in my preparation was fighting off laziness basically. This was a time when I wasn't working. I had a lot of distractions in the sense that I just finished college. I was, in my mind, at least I was free. I was with friends and there was a time when I used to party a lot. We go out a lot.

Angie corroborated this perspective, "I wasn't that motivated at that time. You have personal motivation but you can't focus and need to go out," referring to being a 21-year-old fresh college graduate, who at some point of her review, was distracted due to peer pressure. In these situations, the participants described how being a young adult can provide reasons to be out of focus and recognized the limitations of increased age on their ability to focus on their review.

Family-centeredness. While some participants regarded family-centeredness as a facilitating factor on their NCLEX-RN preparation, some participants had an opposite experience due to the obligations entailed. The responsibilities and experiences of having a family such as getting pregnant, having children, and performing household chores and duties as a spouse, were reasons why having a family had negatively influenced their NCLEX-RN preparation. Nicole said, "But since I had a family to attend to that time that's why I wasn't able to have a full time to study." Anne shared her dilemma in making a decision to take the NCLEX-RN, which she described as a roller coaster experience, "I was working as an LPN and at the same time I'm pregnant, so it's kind of like battling between going for the NCLEX or just stop with where I am." Meanwhile, Mel expressed

her concern about childcare, "...the things that did not help me is because I don't have a babysitter."

Some participants viewed family-centeredness as a positive factor in terms of the availability of support system and as a motivation and inspiration. However, family demands and responsibilities created a negative impact for those married individuals on their NCLEX-RN exam. In addition, this finding possibly links civil status as a factor that can influence the NCLEX-RN experience because interestingly, most of the participants who passed NCLEX-RN the first-time were single at the time of their preparation.

Language. Eight of the participants identified language as an obstacle during their NCLEX-RN experiences. This obstacle was related to unfamiliarity with an English word or phrase, lack of comprehension or misinterpretation of the word, phrase, or sentence in the question, and infrequent use of the English language in everyday life. Angel admitted, "In my review sometimes...there are things that I cannot understand." Jackie attributed this obstacle on the frequency and regularity of using the English language,

...we entirely use English when we are taking the exam. We are not using it every day, although it is an international language, because we have our own dialect. We have a national language, Tagalog. So in reading and understanding, it also matters if you are a good speaker or if you are using it often times.

Mel admitted to her limitations on comprehension saying, "For me, I need to sometimes read it three times or sometimes four times to comprehend and I need to break it down...So I can say it is a barrier."

A different perspective on the impact of the English language on an IEN NCLEX-RN experience was concerns about meeting the English exam requirement.

This was perceived as a bigger obstacle than reading or comprehending the NCLEX-RN test question itself. Some participants had no problem understanding the test questions, both in TOEFL (Test of English as a Foreign Language) and the NCLEX-RN, but had problems with the speaking portion of the TOEFL. This was the case of Anne as she referred to the various English proficiency skills such as reading, writing, listening, and speaking that are tested on the TOEFL.

I think it's more like on the overall requirements to have the RN license, like if they will ask for English requirements before you're going to take your NCLEX. 'Cause I had a hard time passing that too. I had to take my TOEFL twice because of the speaking part.

In addition, most of the participants acknowledged that having a second language can be a disadvantage in taking the NCLEX-RN. However, this was more of a perspective rather than an actual experience. As Yohan aptly expressed,

I think having a different language, apart from the language that the testing system is using basically puts you at a disadvantage. Depending on how, depending on what level you are at, with that certain language that is used for the exam...I am not at a disadvantage because number one, I know I have a very good grasp of the English language and number two, all our exams were in the English language.

Furthermore, it appears that language was a hindering factor primarily for those who failed the NCLEX-RN the first-time time. Four out of the eight participants who reported language was a hindrance on their NCLEX-RN experience failed the exam on the first attempt. These four participants represented majority of the participants who failed the NCLEX-RN the first-time.

Subtheme 2: The global nurse. This is one subtheme where the participants had diverse experiences and opposing perceived influences on their NCLEX-RN experiences.

Healthcare work experience (HWE). A few participants described that having no previous HWE was a hindering factor while studying for the NCLEX-RN. The lack of actual clinical experience as a staff nurse made it difficult to understand simulated clinical situations on the NCLEX-RN. Jackie said, “I have no experience in the hospital so I have a hard time to relate in the situation, especially um when the practical questions will arise in practicing the test question.”

On the other hand, having a previous or current HWE did not necessarily produce favorable NCLEX-RN experiences or outcomes. All participants who failed the NCLEX-RN the first time had both worked in the Philippines and internationally prior to taking the exam. Difficulties with work schedule and studying, competing family and work responsibilities, and differences in nursing practice were cited as reasons for a negative NCLEX-RN outcome. Work schedule was an issue for Em, who was working as a staff nurse in Abu Dhabi (UAE) when he prepared for his exam. He said

So I enrolled myself for the first time in a review center here in Abu Dhabi, which was every Friday but unfortunately I wasn't able to attend all the review just because of my work related schedule.

Blue's experience was related to competing responsibilities as an ICU head nurse and continuing education coordinator in a hospital in Manila (Philippines), while simultaneously enrolled in graduate studies when preparing for the NCLEX-RN. He

recalled, “So it was a lot, it was tough! I was doing a lot (laughs).” For Dawood, differences in nursing practice was a major obstacle in comprehending management of care questions on the NCLEX-RN described as,

I realized a lot of prioritization and delegation in the States are different with my current practice. When I took the exam I always base it on my experience, on what I am doing, which is wrong. Maybe I cannot blame entirely the system because I am with the system.

The nature and location of their HWE influenced NCLEX-RN experiences or outcomes. Twelve of the participants had previous HWE in the Philippines and 11 worked internationally prior to taking their NCLEX-RN. Comparing their HWE in the Philippines and other countries, most of the participants described their HWE in the Philippines as “not helpful” in preparing them for the NCLEX-RN, citing differences in nursing practice, lack of hospital resources, poor technology, and not having a variety of patient cases or diagnoses as reasons. Samantha, who worked in remote areas in Marawi City during the time when nursing positions were scarce in the Philippines, revealed, “My experience in the Philippines was that the level of skill was not high that will contribute to me taking the NCLEX.” When asked whether her HWE in the Philippines helped her prepare for the NCLEX-RN, Pong, who worked in a hospital in the capital city of Manila, said, “No sir. (laughs). Not really. Because we know in the Philippines the hospital equipment, they’re all improvised,” attesting to the lack of resources in Philippine hospitals in the country’s capital city. Moreover, although international HWE generally contributed to favorable NCLEX-RN experiences, differences in nursing

practice in these countries, especially on delegation practices, were perceived as confusing to some participants.

Based on this theme, the participants identified young and increased age, family responsibilities associated with being married, nature and quality of HWE, and the English language as individual and cultural characteristics that hindered their NCLEX-RN preparation.

Theme 2: Being Overwhelmed

Being Overwhelmed refers to the presence of unpleasant psychosocial influences and personal behaviors that are counterproductive to studying, which may be a hindrance for a positive NCLEX-RN experience. There are two subthemes to describe these affective factors: 1) *Psychosocial Factors* and 2) *Negative Behaviors*. Table 13 displays the theme, subthemes, and codes related to *Being Overwhelmed*.

Table 13. Theme, Subthemes, and Codes of Being Overwhelmed

Theme 2	Being Overwhelmed	
Subthemes	<i>Psychosocial Factors</i>	<i>Negative Behaviors</i>
Codes	Anxiety Distractions Pressure Stress	Lack of focus Arguing with the test

Subtheme 1: Psychosocial factors. The participants identified anxiety, distractions, pressure, and stress as psychosocial factors that hindered their NCLEX-RN experiences. Their anxiety was mostly related to test anxiety. Other causes of anxiety included information overload, inadequate preparation, awareness of areas of weaknesses

on the exam, financial concerns related to the cost of the NCLEX-RN application process and review classes, and unfamiliarity with and technical issues related to the testing site.

Anxiety. Anxiety was the most common psychosocial factor that negatively influenced the participants' NCLEX-RN outcome. The participants reported an increased level of anxiety a few days prior to the exam and at the day of the NCLEX-RN. Due to this high level of anxiety during the actual exam, some reported having a mental blackout upon seeing the first test question. Angel described how she felt the night prior to her test, "I'm so stressed out at the time because of anxiety, the anxiousness and my anxiety level is very high," while Jackie recalled her anxiety during the exam, "It was just the first question and I already blacked out." Jan expressed concern about a different source of her anxiety,

It's too expensive to apply for the NCLEX. Thinking about the expenses sometimes can increase my anxiety so instead of focusing on my review I am now thinking about what if I fail I am just wasting money. So that was really an obstacle.

The anxiety coming from the participants occurred at different levels and arose from various causes. For Dawood he knew the source of his anxiety, "Actually I'm very nervous when I took my NCLEX. Why? Because I'm not prepared." Their anxieties were related to their lack of confidence on their review preparation, financial implications of taking the exam, issues on the testing site such as technical issue with the palm identification machine and camera to take photo identification, difficulty level of the NCLEX-RN questions, unfamiliarity of the testing site location which was in another city, province, or country, and test anxiety in general. In addition, their anxieties were

manifested by inability to sleep the night prior to the test, frequent trips to the restroom during the exam, and mental blackout or the inability to think.

Distractions. Distractions from work, household responsibilities, friends, and peers, were similarly identified as hindering factors on the NCLEX-RN experience. The participants acknowledged the presence of distractors during their review and while some were able to effectively manage distraction, others had more difficulty controlling distractions. Nicole blamed distractions as the cause of her inability to focus on the first NCLEX-RN attempt and said, “I had a lot of distractions so I didn’t really have time to focus. I didn’t really take time so when I failed, I know that’s on me.” JR, who just graduated from college when he prepared for the NCLEX-RN admittedly reported his problem on self-discipline during review, “I don’t trust myself in terms of discipline to undertake a review”.

Self-discipline, focus, and parental intervention were necessary for some to refocus into their review. Parental intervention comprised of setting limits and refocusing participants’ behaviors when they were distracted or out-of-focus from studying.

Pressure. Social pressure from expectations of family, relatives, own self, and other people as well as stress related to their families, work, and finances added to the psychosocial factors that negatively influenced NCLEX-RN preparation. While families were generally a source of support, they were a cause of pressure for some. JR, who was one of the top ten performers in the PNLE felt a different kind of pressure and reported,

I would say pressure, for some pressure would be bad for them but for me, it works because if I fail, it would be embarrassing. I had that pressure to pass it, so

the social pressure is there...it was more of a family pressure because I need to pass it otherwise it's embarrassing not to pass.

Pong shared about work-related pressure during her review preparation, “Also here in Qatar, we are facing problems with our housing, in our workplace, and also when it comes to performance evaluation for your work at the hospital. So it seemed like several problems occurred at the same time.” Ricky felt a different kind of pressure as she said, “Oh, what I was thinking that time was since I resigned from my job and my parents are paying all my expenses, I really need to pass this test. So that I will not be wasting time and effort.”

Although these various sources of pressure were considered as hindrances, the participants responded to them positively by redirecting their efforts and focus on their review. The ability to adapt to a negative situation nevertheless, provided them more motivation to pass the NCLEX-RN.

Stress. Stress related to family responsibilities, work, and finances were psychosocial factors that influenced the participants negative NCLEX-RN preparation. “If you are not financially prepared, chances are you will be stressed on the NCLEX,” Pong said. Stress negatively impacted review preparation and caused disruption during the examination. Angel admitted the disruption during her test, “I was actually stressed. For me, I have to go to the bathroom six times.” Recognizing the potential negative influence stress has on review preparation, to a certain extent, they were able to control the source of their stress. As Pong reported,

Second (hindering factor) is stress. As I mentioned earlier, sir, that I told my parents not to mention anything negative that is happening in the Philippines so my solution there is just to focus on my family and my spouse as well.

Subtheme 2: Negative behaviors. *Negative Behaviors* are behaviors that have a detrimental effect on the participants' NCLEX-RN review experience. These behaviors include lack of focus, lack of discipline, lack of prioritization, and arguing with the test. Work-related concerns, competing priorities, and young age were identified as contributory factors to these negative behaviors. Additionally, two participants reported that being young and out of college, the feeling of independence and peer pressure promoted these negative behaviors.

Lack of focus. The participants identified lack of focus as the main negative behavior that influenced their NCLEX-RN experiences. Internal and external factors contributed to lack of focus. Internal factors were related to young age, lack of discipline, lack of prioritization, and lack of concentration while external factors were largely occupational and familial in nature.

Angie said, "...when you're 21, you're still young, you're not like...you want to focus but sometimes you just want to go out and meet friends. Not study." Yohan complained about his lack of concentration, I actually never did that cause I feel like I don't have the concentration skills to finish a whole book." On a different note, Em reported, "...because of my work it was really hard to focus."

The lack of focus resulted in different NCLEX-RN outcomes and seemed to have a greater impact on those who failed the NCLEX-RN the first time. All five participants who failed in the exam admitted to their lack of focus during the preparation as a major

factor for failure. Recognizing the major impact of this negative behavior on their test outcome, refocusing on their goal and their review preparation led to successful passing on the second attempt for the four out of those five participants who initially failed the NCLEX-RN.

Arguing with the test. Generally, positive behaviors related to good study habits produce positive results. However, one participant constantly exhibited a peculiar negative behavior on this review strategies. Dawood admitted his negativity towards his review materials, “There are some questions (on the practice test) there that I don’t really agree... Whenever I’m exposed again to that question, I am still wrong. Why? Because I’m fighting with it.” Putting this in context, Dawood admitted that due to lack of preparation on his first NCLEX-RN attempt, he mostly based his thought process on his actual HWE, which he later realized was wrong. Learning from this mistake, he intentionally explored the differences between his HWE practices and those with the U.S. healthcare system and reconfigured his thought process when answering practice test questions on his second attempt. This change in negative behavior proved helpful as he passed the NCLEX-RN on his second attempt.

The presence of psychosocial factors such as anxiety, distractions, pressure, and stress, as well as negative behaviors such as lack of focus, lack of discipline, lack of prioritization, and arguing with the test were affective factors under the theme, *Being Overwhelmed*, that had negative influences on the IEN NCLEX-RN experience.

Theme 3: Training as a Global Nurse

The subthemes related to academic factors that were considered as hindering factors on the participants' NCLEX-RN preparation experiences were: 1) *Philippine Nursing Education*; 2) *Areas of Weaknesses*. The participants had opposing perspectives and experiences on academic factors that influenced their NCLEX-RN outcomes. Table 14 presents the theme, subthemes, and codes related to *Training as a Global Nurse*.

Table 14. Theme, Subthemes, and Codes of Training as a Global Nurse

Theme 3	Training as a Global Nurse	
Subthemes	<i>Philippine Nursing Education</i>	<i>Areas of Weaknesses</i>
Codes	Gaps in the nursing curriculum Clinical experiences	Pharmacology Medical-surgical nursing Delegation Prioritization Multiple response questions

Subtheme 1: Philippine nursing education. Some participants considered their baccalaureate nursing degree from the Philippines as a facilitating factor, but for some, it was a hindering factor due to the gaps in the nursing curriculum and issues on students' clinical experiences.

Gaps in the nursing curriculum. The participants recognized the existence of gaps in the Philippine nursing curriculum when they prepared for the NCLEX-RN. As Blue said, "So I think anything that I found that was lacking in my educational preparation, I did my best to find something that would address that."

King referred to the gaps in the curriculum that were reflected in her preparation for the Philippine nurse licensure exam and said,

These are things that I did not learn in the NLE (PNLE). I really learned a lot from NCLEX. Not so much on the local board. It is really limited in the local boards but in the NCLEX, it really broadened my knowledge about nursing. I hope it's like that in the Philippines.

The identified gaps in the curriculum include management of care concepts such as delegation and prioritization, transcultural nursing, and social determinants of health. The type of testing in nursing programs as well as gaps in clinical practice for nursing students were also identified as gaps in the curriculum. On cultural diversity and cultural competence, Blue said,

As a new nurse in the United States, that, that could be something that, you know, I need to know more about. I mean, without knowing those factors, I mean, certain determinants of health and how healthcare is approached here (in the U.S.). That, that is a big, big, big gap in the education of nurses in the Philippines. Yeah, we don't know that. Yeah, you would not be able to answer the question.

Yohan mentioned curriculum gaps that were related to management of care,

I think it was also a bit difficult specially the delegation part because coming from a setting in the Philippines or at least our clinical rotations when I was in the University...it was very hard because I don't think it's about we didn't do the studying for the NCLEX but I think I did have a bit of a difficult time answering those things just because of background in education.

One participant believed that these gaps in the curriculum became more evident when an IEN applies for NCLEX-RN in Canada. Mel applied for the exam in Canada but the National Nursing Assessment Service (NNAS) her credential evaluation, reported

several academic deficiencies in her nursing degree from the Philippines. She said, “And there is a lot of gaps that they need to bridge,” denoting on the bridging programs that IEN in Canada are required to do meet the identified gaps in their nursing education and clinical practice. The Philippine nursing curriculum was described as an overloaded curriculum with a lot of general education subjects that were called “irrelevant” by a participant. Mel said, “They need to eradicate those subjects that are not necessary so that nursing back home can catch up with what is the trend in global, like here in Canada and in the U.S,” comparing the nursing curriculum in Canada where nursing students exclusively focus on nursing courses once they are in nursing school.

With the identified gaps and overloaded courses in the Philippine nursing curriculum and the need to repackaging the curriculum to fit the needs of the global labor market, the participants felt that there is a need to review and revise the Philippine nursing curriculum. JR made a strong statement about the need for curriculum revision when he said,

NCLEX has an influence on how the nursing curriculum should be made in the Philippines. It serves like a template. Whatever happens to NCLEX in the future, like with the next generation testing, it would eventually affect how it is taught in the Philippines...By the way how the breakdown of concepts in the NCLEX would eventually affect how nursing is taught in the Philippines, that's how important NCLEX is. The structure.

The participants reported that although the Philippine nursing curriculum is comparable to the U.S. nursing curriculum, it was described as an overloaded curriculum and there are certain gaps in curriculum content and testing practices that need to be addressed. The most common concern identified was on the area of delegation and

prioritization where most participants described this area as the most difficult and most challenging part of the NCLEX-RN. The participants believe that a review and revision of the nursing curriculum is needed to help address the needs of future PEN who will take the NCLEX-RN.

Clinical experiences. The participants unanimously reported that the theoretical foundation in their nursing programs was good. However, they had varied clinical experiences that were considered as a facilitating factor for some and a hindering factor for others. As JR said,

...the content of the lecture is heavily influenced by the content of U.S. textbooks...But in clinical practice, that is a problem. They will say that this is what is actually done in practice but I really didn't see how it is done in practice.

Yohan added,

I think it was also a bit difficult specially the delegation part because, coming from a setting in the Philippines or at least our clinical rotations when I was in the University and even practicing in the Philippines, we didn't have a whole lot of delegation, so to speak.

While the majority of the participants positively described their clinical experiences as students as helpful in preparing them for the NCLEX-RN, some participants had contrary perspectives. This was primarily attributed to the differences in scope of practice and lack of resources in the environment where they have clinical experiences.

Subtheme 2: Areas of weakness. Most of the participants identified the concepts of prioritization and delegation, the nursing courses pharmacology and medical-surgical

nursing, and basic nursing concepts as the difficult content areas on the NCLEX-RN. Among the alternate questions on the exam, they described the multiple response or select all that apply (SATA) as the most difficult type of question, followed by the sequencing type of question. They attributed their difficulty in answering prioritization and delegation questions on the NCLEX-RN on the lack of and difference in delegation practices in clinical nursing practice when they had clinical rotations as students. Dawood said,

...there is no distinctive roles and responsibilities, delegation if I may say because the word delegation, honestly, as a nursing student I rarely hear that word. I just learned it when I'm on my fourth year. I think my teacher was going to the U.S. also. So having the CGFNS exam, they are talking about delegation and all that. I don't even know, to tell you honestly, I don't know what delegation was that time.

The environment of the nursing students during their clinical rotation also played a role in the difficulty of comprehending delegation and prioritization because there are no licensed practical nurses in the Philippines. Angie explained her difficulty with delegation, "I had a hard time because I got confused because they (U.S.) have an RN, they have an LPN, LVN. They have a lot of manpower. Because in the Philippines, there's only this staff nurse, that's it."

Additionally, the participants claimed that pharmacology was a common area of weakness due to the different generic and trade names of medications that are used in the Philippines and in the U.S. As Anne mentioned, "I practiced more on pharmacology because I discovered that there are a lot of medications that I never encountered." Dosage and drip calculation questions triggered anxiety among the participants during the exam.

Jackie, recalled her reaction upon seeing that the first question on her NCLEX-RN exam was on dosage calculation, “Math. Numbers makes me nervous. So the first question, when I saw it, I blocked out because I was so nervous.”

Furthermore, medical-surgical nursing, particularly cancer, endocrine disorders, fluids and electrolytes, were reported as difficult content areas on the NCLEX-RN exam. As Jackie affirmed, “...the most difficult ones are in MS (medical-surgical).” Part of the difficulty on this content area stemmed from participants’ basic nursing education, as Yohan revealed, “A lot of the harder questions (in medical-surgical nursing)...they were difficult partly because even in the undergrad studies, this was a fairly a confusing subject for me.” The basic or fundamental concepts were also described as difficult and challenging, as KC recalled, “I found the most basic questions more difficult for me.”

The multiple response or SATA questions were regarded as the most difficult type of NCLEX-RN question. Angie shared her experience saying, “The only thing I can remember is, that makes me nervous is the ‘select all that applies,’ the SATA.” Mac agreed, “The very first question was a SATA question and I was surprised...The SATA questions are really difficult.”

The NCLEX-RN performance reports that were given to the participants who failed the NCLEX-RN provided a glimpse of the different NCLEX-RN categories that were evaluated as “near passing” or “below passing”, which were the participant’s areas of weaknesses. The categories that were commonly identified as areas of weaknesses included Pharmacological and Parenteral Therapies, Management of Care, and Physiological Adaptation. To a lesser extent, the following categories were also

mentioned as areas of weaknesses, Basic Care and Comfort, Safety and Infection Control, Risk Reduction Potential, Health Promotion and Maintenance.

Certain gaps in the Philippine nursing education, particularly on the clinical experiences of the students and some nursing courses, were identified as hindering factors under the theme *Training as a Global Nurse*. Nursing courses such as pharmacology and medical-surgical nursing were found to be the most difficult subjects in the NCLEX-RN. The difficulty in pharmacology was related on dosage calculations and differences in generic and brand names of medications in the Philippines and the U.S. Alternate format questions such as the SATA and sequencing type of questions were said to be very challenging types of NCLEX-RN questions. To make the nursing curriculum more relevant to future NCLEX-RN examinees and to ensure nursing graduates who are globally competitive, majority of the participants advocated for a review and revision of the nursing curriculum in the Philippines.

Theme 4: Ineffective Learning

Ineffective Learning as a theme refers to various environmental factors that can disrupt the effectiveness of a learning environment. The subthemes that the participants identified as hindering factors include: 1) *Learning the Wrong Way*; 2) *Inadequate Resources*; and 3) *Competing Responsibilities*. Table 15 presents the theme, subthemes, and codes related to *Ineffective Learning*.

Table 15. Theme, Subthemes, and Codes of Ineffective Learning

Theme 4	Ineffective Learning		
Subthemes	<i>Learning the Wrong Way</i>	<i>Inadequate Resources</i>	<i>Competing Responsibilities</i>
Codes	Ineffective review strategies Exposure to non-ideal clinical environment Lack of preparation Unfamiliarity with the NCLEX-RN Unfamiliarity with the U.S. healthcare system Poor quality of review center	Lack of time Finances Lack of resources Study space Unfamiliar environment	Family responsibilities Work responsibilities

Subtheme 1: Learning the wrong way. This subtheme refers to various factors that either do not contribute to effective learning or reduces the effectiveness of the learning process. This includes ineffective review strategies, exposure to non-ideal clinical environments, lack of preparation, unfamiliarity with the NCLEX-RN and the U.S. healthcare system, and poor quality of review centers.

Ineffective review strategies. Ineffective review strategies were mainly related to language and arguing with the practice questions. Limitations on the use of the English language was identified as one factor that hindered the participants' NCLEX-RN learning experience. The participants admitted that misinterpretation and misunderstanding of a test question occur when they are unaware of the meaning of a certain word. Dawood revealed his problem with misinterpretation,

sometimes when I read the whole sentence, maybe even if it is a simple sentence, I may interpret it differently. That's why when I finish the exam it's oh...There is no problem with the reading, the problem is in comprehending.

Angel said, “Um, there are times that that is the case. Specially sometimes if that English word is scientific, it's like, what is that word again?” Mac elaborated on this limitation,

I think it's also on the technicalities of the words that are given in the question. It's like if there is one word within the question and that word is something that I am not familiar with, and if that is the main keyword in that question, then I will misinterpret the question. And if I misinterpret that question or if it's under choices then I will consequently get the wrong answer because I did not understand that word.

Because they spent more time studying than taking the actual test, they encountered more questions that they misinterpreted during their preparatory phase than on the actual examination itself. Mac said,

I did not encounter that during the test...I encountered those when I was answering the practice tests and sometimes it is really just that one word. And when I try to look it up and find out that, oh, that's what it means and I'm like, why do they have to make this word difficult?

In addition, Em said as he referred to his limitation in understanding colloquial English, “At some point yes. Because in the NCLEX there are some informal words that are used. They love to use the quote and quote words, as like patient said, quote and quote. You really need to observe what it means.” Sentences that contain unfamiliar English words, technical or medical terminologies, and colloquial English words were identified as the common sources of misinterpreted words.

Moreover, although arguing with the test was previously referred to as a negative behavior, it can also be described as an ineffective learning strategy for the NCLEX-RN preparation. As Dawood stated, “...there are some questions there that I don't really agree...Whenever I'm exposed again to that question, I am still wrong. Why? Because

I'm fighting with it.” He used this approach on his review preparation for the first NCLEX-RN attempt and acknowledged it as a wrong approach to learn.

Exposure to non-ideal clinical environment. The participants consistently mentioned the phrase “*non-ideal set-up*” as one factor that negatively affected their NCLEX-RN preparation. Dawood described, “...being exposed to this system, we don't have enough resources, we don't have ideal set up,” referring to the healthcare system in the Philippines. The phrase *non-ideal set-up* refers to the lack of standards, structure, and process in the clinical environment where they had clinical learning experiences as students, as well as in past and current HWE.

JR recalled his experiences, “But in clinical practice, that is a problem. They will say that this is what is actually done in practice but I really didn't see how it is done in practice,” alluding to his curiosity in comparing the nursing standards and procedures from the nursing textbooks and his actual clinical experience as a nursing student. Dawood provided a different perspective when he stated, “We are good in resources... we're good in managing resources, that's why whatever is there in the system, we manage. Ideally, it is not acceptable by theory...,” explaining that resourcefulness and resource management may have helped offset the lack of resources, but the processes are far from established standards of practice. As one participant described, “Because we know in the Philippines the hospital equipment, they're all improvised.”

The absence or lack of equipment and technology, absence of clinical standards of practice, and differences in nursing practice in these clinical environments either resulted in absence of, inadequate, or inappropriate learning of nursing concepts or procedures.

For instance, delegation of nursing care is one major difference in practice that is confusing to the participants. Referring to the presence of RNs, LPNs, and CNAs in the U.S. healthcare system, Angie said, “At first, I had a hard time because I got confused because they have an RN, they have an LPN, LVN...Because in the Philippines there's only this staff nurse, that's it.” Consequently, this form of ineffective learning affected their NCLEX-RN outcome. As Dawood shared, “Clinical practice really affects my exam results.” Samantha, who worked as a nurse in the Philippines and Oman, agreed, “My experience in the Philippines did not help much.”

Yohan shared how his interactions with other nurses supported this claim as a hindering factor on an IEN NCLEX-RN preparation,

I actually also help a few people study for the NCLEX and uh they come from a very clinical background. They've been working a number of years already in the Philippines and abroad. And they would always question the answers on the NCLEX question because in actual practice, this is what they were doing and that makes it a bit more difficult to for them to actually understand or answer these questions because it's sort of a conflict of what's in the NCLEX with what they're actually doing.

Lack of preparation. One of the reasons for the participants' failure on the NCLEX-RN was related to lack of preparation, which was caused by work and family-associated time constraints. Dawood attributed his failure on the first NCLEX-RN attempt to lack of preparation, as he shared, “When I took the NCLEX here in 2018, I was not really prepared. But I read. I read books. But I didn't put my heart into it. So when I took the exam...I flunked but I accepted it because I did not do anything.” Samantha shared a related experience, “...because I crammed, the last topic that I did not

study was psych (Psychiatric Nursing).” Mel was faced with childcare issues and the need to work on her Canadian citizenship application and reported, “So I did not eventually prioritize to study for the NCLEX.” The participants recognized the need and relevance of adequate preparation but contextual factors prevented them from having adequate review preparation.

Unfamiliarity with the NCLEX-RN. The participants identified unfamiliarity with the NCLEX-RN as a factor that impacted their learning for the exam. The areas of the exam that they were not familiar with included the test plan, type of questions, use of computer, computer grading or scoring. Em stated his unfamiliarity with the NCLEX-RN during his first attempt, “During the first time, I really don't know how it goes. What are the best components, how are the questions...That can be a hindrance for some first-timers.”

For some, the degree of difference between the NCLEX-RN and the PNLE was a concern. As King mentioned, “I don't have any ideas that time what is the major difference between the two exam.” Knowing that these two exams were different was stressful, as Yohan claimed, “For me, it was a bit different because of the realization that it was just very different, the NLE and the NCLEX just too very different exams so for me, that was, that was stressful.”

The computer mode of testing and its nature as an adaptive test was also a concern. Angie shared, “At that time, computer was not widely used. We have computers, but we do not use it for testing. It was my first time to do computerized testing so I was intimidated by the use of the computer.” Anne shared a similar

experience, “At first sir it was like, confusing and it will make you feel nervous because we are not accustomed to computer adaptive testing.”

The structure of the NCLEX-RN emerged as a barrier to learn the exam effectively. Participants’ experiences in nursing education and in the PNLE did not involve use of the NCLEX-RN test plan and computerized testing, which accounted for their unfamiliarity with the NCLEX-RN structure and mode of testing. Recognizing it as a hindrance, one participant recommended that first-time NCLEX-RN takers familiarize themselves with the test plan.

Unfamiliarity with the U.S. healthcare system. The participants acknowledged that the NCLEX-RN is a U.S.-based nursing exam, which is based on the U.S. healthcare system. They identified unfamiliarity with the U.S. healthcare system as a hindering factor in effectively learning about the NCLEX-RN exam. King said, “I was anxious and curious at the same time 'cause I don't have any idea about the health care system in the U.S.” This unfamiliarity created a negative emotional response that may have affected learning and NCLEX-RN review preparation.

Poor quality of review centers. Enrolling in a review center was one of the common review strategies used when preparing for licensure examinations such as the PNLE and NCLEX-RN. As Yohan recalled,

I enrolled in a review center which was fairly popular at the time ...early 2000 to 2008 or 2009 there was a really big boom of nursing in the Philippines and a lot of these reviews center started popping up left and right. This was a very popular way to go in terms of review study for the NCLEX.

While those who availed themselves of these review center services were generally satisfied with the quality of the review program, a number of participants reported concerns about the quality of the nursing review programs that were provided. JM said,

And sometimes the review center reviews the questions and answers, the answers are not based on references. When you read Kaplan or Saunders and you study the answers, it will give you the references that were used like what book or pages. On the other hand, in the Philippines, we just rely on the lecturer or reviewer's knowledge or expertise. So that can be a factor too for the success or failure of the NCLEX exam.

The breach in the integrity of the 2006 PNLE that was allegedly related to a review center became a source of psychological stress to the examinees of 2006 PNLE, a trauma that eventually affected their NCLEX-RN preparation. As Yohan reported,

...that's why it was stressful. So, I don't know if this is worth mentioning, but for your research's sake, that batch was part of that controversy where alleged leakage of the exam materials were given out to a number of examinees.

In general, the participants attributed the use of counterproductive learning strategies, exposure to a non-ideal clinical environment during training period as a nursing student, inadequate preparation, unfamiliarity with the NCLEX-RN structure and the U.S. healthcare system, and ineffective teaching strategies in review centers as experiences that had negative influences on their NCLEX-RN preparation.

Subtheme 2: Inadequate resources. *Inadequate Resources* describes the lack of quantity and quality of various resources that are needed to prepare for the NCLEX-RN effectively. These include resources such as time, finances, review resources, study space, and environment.

Lack of time. The participants referred to lack of time as a major hindrance when they prepared for the NCLEX-RN. Full-time employment, family and childcare responsibilities, procrastination, and other distractions prevented them from having adequate time for their review preparation. Dawood said, “I did self-review. I did not go for an online review center. I did self-review because I don't have the luxury of time.” Mel shared a similar experience, “I only have like 1 ½ to 2 months to study for the NCLEX, how can I do that?” KD added, “...since I was working and I work in shifts, that is also one of the obstacles. If you are on night shift, you have time during the day but you use it to sleep and rest rather than to study.”

Samantha who had a year to prepare recalled,

I am cramming because even I was given a year to review because I started the processing of my application that time, but it was hard because I had a lot of responsibilities like my household chores, responsibility as a wife, responsibility as a daughter for my parents...so there is a lot of things going on in my mind aside from studying.

The lack of time appeared to be a major hindering factor for most of the participants but it had a greater impact on those who failed the NCLEX-RN the first time. The five participants who failed identified lack of time as one of their obstacles as a contributing factor to a negative test outcome. Furthermore, time lag was a relevant time factor that resulted to negative NCLEX-RN experiences. Those who failed the NCLEX-RN the first-time had an average time lag of 10.4 years from the time of graduation from nursing to the time of taking the exam.

Finances. Compared to USEN, IEN have different requirements when applying for the NCLEX-RN. The high cost of complying with these requirements, such as the CGFNS credentials evaluation, English proficiency exams, processing of school and Philippine licensure documents, international postage fees to send the requirements to the U.S., and the NCLEX-RN application fee are expensive for IEN. The complexity of the application process for an IEN paved the way for agencies to offer these services at a costly price, which added to their financial burden. Those who were based in the Philippines during the application process had a more difficulty time meeting these financial requirements compared to those who were working internationally while processing their NCLEX-RN application. Jan reported, “It's too expensive to apply for the NCLEX...So that was really an obstacle,” and Pong concurred,

I used an agency for processing my documents so they are a little pricey. I could not buy the things that I wanted here at that time. So that's it. Financial problems. It came to a point during my preparation for the NCLEX, um, I stopped paying for three months because I could not pay them. I had no money to send them. That is one of the factors or problem that I encountered.

Additionally, due to the unavailability of an NCLEX-RN international testing site, taking the exam internationally requires added cost for visa application and travel expenses. For Jackie, “There was no testing center in the Philippines, so I had to go to either Saipan or Hong Kong so I think it was a little bit hard because I have to spend extra for airfare, hotel.”

Review resources. The availability and accessibility of NCLEX-RN review resources was an obstacle for some participants when they prepared for the NCLEX-RN.

Some participants who took the NCLEX-RN in the early 2000s mentioned the lack of online resources that were available when they prepared for the NCLEX-RN. One participant mentioned the lack of internet access as a barrier in searching for review materials. Thus, print materials were their primary sources of review materials. As KC said, "...I just read through them (review books) and do questions there since we have no internet in the Philippines," referring to focusing on NCLEX-RN books and review notes from her review for the PNLE as her main resources.

While the internet provided easy and fast access to online review resources, it also led to information overload. The presence of multiple resources resulted in confusion about the relevance or effectiveness of the available resources. For some, the inability to prioritize the use of resources became a challenge. Thus, the amount of review materials became a hindrance to studying effectively. KD used multiple resources during her first NCLEX-RN attempt and reported, "And you have a lot of resources you don't know which one to use first... You know, jump from one resource to another. You can't finish anything." On her second attempt, KD focused on two resources and said,

I think for preparing for the exam you have to use firm resources and just use them. Each resource will give you different information. But if you focus on one main thing, your focus is there. Just keep on repeating it, repetition. That's all I used.

She attributed her success on the second NCLEX-RN attempt to her ability to focus more with fewer resources.

While some participants reported that using multiple resources was confusing, others reported that increasing the number of resources was more helpful. Conversely,

other participants find more helpful to focus on a fewer number of resources.

Furthermore, for some participants who were unaware of relevant resources to use, they resorted to online NCLEX-RN support groups to determine the resources that are used by others who are preparing for the exam or by those who have successfully passed the NCLEX-RN.

Study space. The availability, accessibility, and quality of study space had an influence on the participants' NCLEX-RN experiences. Other than their residences, the participants' study spaces included review center, dormitory, boarding house, coffee shop, work place, and bus or car. Some participants reported distractions within their homes as a reason to avail of lodging elsewhere in order to focus on their review. Jackie, who stayed in a dormitory for six weeks, said, "I had to leave the house for the moment just to review." Angel shared how her workplace at the hospital became a study space, "And also at work, I use breaks in between the study."

Review centers for preparing examinees for various nursing licensure examinations are abundant in the Philippines. However, these are not available in some parts of the country and internationally. The presence of a review center was a need among the participants when they were working outside the Philippines and were preparing for the NCLEX-RN. "I don't have the resources like the review center. So, I have to search for online resources and ask the opinions of other nurses on what they used," shared Samantha who needed a review center while she was in Oman.

Problems with availability and accessibility of review centers can be a logistical problem. JM, who hails from Dipolog City, had to go to Cebu City that is 267 miles away to enroll in a review center. He shared his struggles,

So I have to live in Cebu City just to review NCLEX because online review programs were not yet popular at that time. I had to travel for three rides before getting to the Kaplan review center. My main obstacle was how far the review center is...I have to go to a different city to review. So that was one big obstacle...It takes about 2 hours before I can get to the review center.

JM further shared a similar experience of a colleague who had issues with study space and learning from his own experience, he emphasized the importance of a good study space,

He didn't have a good access to a review center so he had to do it online. But he has difficulty adapting to it. And he was reviewing in his house and with all these disturbances, he easily gets distracted and failed exam. So he had to take the exam again. So I believe that's one important thing to consider, location of your study place or review center.

The participants valued the importance of study space on their NCLEX-RN review preparation. The quality of a study space, such as presence of distractions, can produce a negative experience while studying. Furthermore, the absence of a review center was a factor that forced some participants to self-study, despite the need to enroll in a formal review class. Those who had a longer time lag between graduation and taking the exam felt a more pressing need to have a structured review in a review center. In the presence of a review center, its location and accessibility had an impact on their preparatory experiences.

Unfamiliar environment. Being in a different environment in itself can cause uneasiness that can impact NCLEX-RN preparation. Samantha, who works in Oman, shared, “Generally, obstacles like I have said, time schedule specially I am not in a country where I was born and I am outside my comfort zone.” Studying in a new environment can likewise be an obstacle, as experienced by Nicole, who had just moved to the U.S.,

What I encountered during my preparation is that, because I just got here (U.S.), I was not familiar with the place. That’s it. That’s the only thing that added to my anxiety because I was concerned about how to get to my review center.

Taking the NCLEX-RN in a different city or another country added another layer of obstacle on the participants’ NCLEX-RN experiences. Jackie sat for the NCLEX-RN in Saipan and said, “Even though I traveled with my friends who also took the test, it was difficult for me to adjust. Samantha agreed and said,

We are concerned with the travel and we need to be prepared of the travel expenses and the time, you are going to a foreign country that you are not familiar with the area just to take the exam so it adds more on the confusion or like, Here I am taking an exam on a different place, which I am not familiar at all.

Even for those who took the exam in the Philippines had concerns with the unfamiliar environment. Angel recalled her anxiety before the exam as partly related to her unfamiliarity with the testing area in Manila,

I tried to research 'cause I'm not from Manila, I'm from a province. I'm not familiar with the place in Manila where the exam is. So, what I did I tried to Google it...I researched for the place. I researched for the test center where I am, the near hotel or house or the room that I can rent that it doesn't require me to travel more.

The level of familiarity with the environment used for studying and taking the NCLEX-RN influenced the participants' NCLEX-RN experiences. Whether the participants were in their country of origin or internationally at the time of their NCLEX-RN preparation and testing, their exposure to a different environment was another factor that negatively influenced their NCLEX-RN experiences.

Subtheme 3: Competing responsibilities. *Competing Responsibilities* refers to the presence of multiple tasks that need to be addressed simultaneously. The inability to prioritize and accomplish these tasks successfully may have a negative impact on the participant's NCLEX-RN experiences. This subtheme refers to family and work responsibilities that prevent the participants from learning effectively for the NCLEX-RN.

Family responsibilities. The Filipino culture is known for being family-centered. Focusing on the needs of their families prevented the participants from devoting full-time to NCLEX-RN preparation. These needs are related to the performance of duties as a spouse, a mother, a son, or daughter. Family situations such as childcare was a major hindrance for some participants. Mel attributed her failure on two NCLEX-RN attempts to childcare issues and pregnancy during her second attempt to take the exam. She said, "I failed because it's hard to deal with a toddler that is one year old." This experience was corroborated by Nicole, who failed on her first NCLEX-RN attempt and reported, "But since I had a family to attend to that time, that's why I wasn't able to have a full time to study." KD further agreed, "The main reason was I was working and my family was here," referring to her failure on her first NCLEX-RN attempt.

While families provided a strong support system, they can also become a financial burden due to the obligation or responsibility to financially provide for the family if a family member is the only breadwinner or an overseas Filipino worker (OFW). As Samantha, a former OFW in Oman, shared,

...it was hard because I had a lot of responsibilities like...responsibility as a daughter for my parents, I have to work for them and send money to the Philippines. So, there is a lot of things going on in my mind aside from studying.

Competing responsibilities related to family obligations was a hindrance to the participants' ability to study effectively for the NCLEX-RN. Their family-centered culture required them to prioritize meeting their family needs before their own personal needs. Interestingly, 60% of those who failed the NCLEX-RN on their first attempt were married. Compared to those who passed the NCLEX-RN the first time, only 26% of them were married. This finding shows that being married may influence NCLEX-RN experiences and outcomes.

Work responsibilities. The participants mentioned work-related schedules and responsibilities as hindering factors to having a quality and effective studying time. KD shared how working night shift affected her study schedule,

If you are on night shift, you have time during the day, but you use it to sleep and rest rather than to study. Even if you work night shift and you're off the following day, you feel tired and it's a different kind of exhaustion due to lack of sleep.

Although Angel used her work breaks to review using her phone applications, she spent more time reviewing for the NCLEX-RN when she was not working. She recalled,

“During days off, I would have 12 hours, ah 6 hours of study and then the rest of the hours will be spent to my family.” Anne added, “I was working and studying at the same time so right after work I make sure that I will spend like one to two hours per day to study.”

The work schedule of the participants became a hindrance in effectively studying for the NCLEX-RN. While some of them were able to study during break time at work, most of their studying was done on days that they didn’t work. This finding shows the influence of work responsibilities as a hindrance for an effective review schedule when preparing for the NCLEX-RN.

In general, faulty learning strategies, inadequate resources such as lack of time, finances, study space, and the presence of work and family responsibilities that compete with study times scheduled were shown to hinder the effectiveness of learning during NCLEX-RN preparation. These can have negative influences on the overall NCLEX-RN experience.

Theme 5: Regulating Nursing Practice

Three subthemes describe *Regulating Nursing Practice* as a hindrance for a positive NCLEX-RN experience: 1) *Licensure Examinations*; 2) *NCLEX-RN Application Process*; and 3) *Regulatory Requirements*. Table 16 shows the theme, subthemes, and codes related to *Regulating Nursing Practice*.

Table 16. Theme, Subthemes, and Codes of Regulating Nursing Practice

Theme 5	Regulating Nursing Practice		
Subtheme	<i>Licensure Examination</i>	<i>NCLEX-RN Application Process</i>	<i>Regulatory Requirements</i>
Codes	Philippine Nurse Licensure Examination (PNLE)	NCLEX-RN application	CGFNS English proficiency exams

Some experiences in the PNLE and the regulatory requirements and processes involved in applying for the NCLEX-RN in the U.S. and Canada were considered as hindering factors on the participants' overall NCLEX-RN experiences. Applying for NCLEX-RN in Canada was found to be different and more difficult for IEN.

Subtheme 1: Licensure examination. While the majority of the participants claimed that the PNLE was helpful in preparing for the NCLEX-RN, others reported concerns about the difficulty and type of the test questions in the PNLE. No one directly said that the PNLE was a hindrance in taking the NCLEX-RN, however, their responses alluded to some issues on the PNLE that are negatively impacting one's ability to pass the NCLEX-RN. The participants are relatively aware that the PNLE and NCLEX-RN are two different exams but there is lack of awareness on the degree of difference. As Samantha said, "I know it (PNLE) is different from the U.S. board exam." This lack of awareness has created anxiety on some participants when they prepared for the NCLEX-RN. Part of Yohan's stress was related to this as he reported,

I soon realized how different the NCLEX would be from the... from the local licensure exam is, by the way the questions are set up and just the context of a lot

of the questions within the local licensure exam. It was just very different from the practice on the NCLEX that I was taking at the time.

The stress brought about by the differences in the two exams was a concern for the usefulness or applicability of the PNLE when taking the NCLEX-RN. Such was King's argument,

So I'm not sure if I would be able to apply what I learned locally (PNLE) and I'm going to take the NCLEX... These are things that I did not learn in the NLE (PNLE). I really learned a lot from NCLEX. Not so much on the local board. It is really limited in the local boards but in the NCLEX, it really broadened my knowledge about nursing. I hope it's like that in the Philippines.

However, recognizing that the textbooks in the Philippines are similar as those that are used in nursing schools in the U.S., JR argued that, "If there were any contextual differences it would be very minimal because we use US textbooks in the Philippines. So, there would be a very close linkage between the local boards and NCLEX." JR continued his argument that the differences would be minimal because PNLE questions were sometimes copied from NCLEX-RN books. He said,

Like in the local boards, the questions that are developed by the Board of Nursing are sometimes copied from NCLEX books. So, most likely the content of the boards (PNLE) is the same with NCLEX maybe, except for the research...community health nursing.

Another aspect of the PNLE that was concerning for the participants was the type of questions asked in the PNLE, which were very different from NCLEX-RN questions. This was regarded as a disadvantage for Philippine nursing graduates when taking the NCLEX-RN. King recalled, "...NLE is more bookish but straightforward unlike the

NCLEX that you really have to think,” alluding that the PNLE was easy and does not require critical thinking. “I think NCLEX is more about critical thinking. It's not about memorization unlike in the Philippine nursing licensure which is more memorization. In NCLEX, you have to have high level of critical thinking,” Angie agreed. JM shared his opinion on this but with a unique perspective,

... probably the practice exam also matters because in the Philippines, our board exam is designed in multiple choice questions in A, B, C, and D. And there is a tendency that Filipinos memorize the questions and answers.

The participants believed that the questions on the PNLE were not rigorous enough to test critical thinking.

Nevertheless, some participants argued about the level of difficulty of the PNLE compared to the NCLEX-RN. Jan said, “I feel like the local board (PNLE) was more difficult for me because in our board exam you need to answer 500 questions and take the test in two days.” Ricky agreed but gave a different reason why the PNLE is more difficult, “NCLEX that it is easier than the local board because on the NCLEX, they really ask nursing concepts not like on the local board, their questions are out-of-this-world,” implying on the questions on the PNLE that are sometimes trivial and irrelevant. As JR recalled, “I was also concerned about possible questions on operating room (OR) instruments or types of gas, those detailed information about OR. Because they were asked in our board exam.”

Acknowledging that the questions asked in the PNLE may not be relevant to those who are taking the NCLEX-RN, the participants believe that modifying the board

questions to include more situational types of clinical questions or critical thinking

questions may be helpful. King made a strong argument when she said,

Yes maybe I can say that it has something to do with how the questions in the NLE is constructed. I don't wanna say it is biased. I hope the NLE questions were designed like the NCLEX, where it is situational...I also want to add that at least, the NLE can serve as a preparation to take the NCLEX. Like at our time, they were really different. I think that happens it won't be difficult for our nurses to transition from the NLE to the NCLEX.

A very unique and interesting issue about the PNLE that had a tremendous psychological and emotional impact on the examinees was the 2006 PNLE leakage controversy which was the result of the test security being compromised. Incidentally, five of the participants were graduates of 2006 and they shared their experiences about this controversy. King recalled,

I was in 2006 batch, there was a little bit of a trauma in taking the exam because I retok the board exam in 2007 and then I reviewed for the NCLEX in 2008. So, it was pretty exhausting cause I have to shift studying the local board and studying the NCLEX.

Yohan shared how the controversy influenced his NCLEX-RN preparation,

...that batch was part of that controversy where alleged leakage of the exam materials were given out to a number of examinees. So, after the results were released, instead of celebrating there was a lot of uncertainty for, for the nurses that passed the exam...So after that there was a lot of...there were a lot of nurses who had a hard time looking for work because of the bad controversy. For me at least that added to the stress of having to study for the NCLEX.

The trauma caused by the PNLE controversy that marred the integrity of examination and results for the 2006 examinees and the concerns regarding the differences between the

PNLE and the NCLEX-RN were licensure examination-related issues that influenced the NCLEX-RN experiences of the participants.

Subtheme 2: NCLEX-RN application process. The NCLEX-RN application process in itself was reported to be challenging and stressful. From procurement of documents from schools of nursing and various government agencies such as the Professional Regulation Commission (PRC) to sending these documents to CGFNS, International, IELTS, and eventually the chosen U.S. Board of Nursing, the process involves a lot of leg work, financial resources, and time. Moreover, the length of time spent on waiting for these documents to be processed became a cause of complacency and procrastination among the participants, which influenced the quality of their NCLEX-RN preparatory experiences.

Mac shared his experience with his NCLEX-RN application process,

I think the most difficult part is the process of application because of the documents...So that has been the most difficult part of my preparation, the application and sending of documents from the Philippines, yeah I think that documents from school, PRC, and sending them to CGFNS in order to be eligible to take the exam. It was really hard for me because I am here in UAE physically so nobody is going to do it for me.

Yohan similarly reported this experience,

That was one of the most frustrating and difficult parts for me because of the procedure back then... I say that the entire process of taking the NCLEX, I say the least, is difficult I think for IEN just because number 1, the paperwork is a lot for us.

Related to the application process is the financial implications of processing the documents. Jan said, "It's too expensive to apply for the NCLEX," and Yohan agreed,

“with the review classes for the NCLEX, that's also the time when I started processing my papers for, uh, to be able to take the exam and again, that took a lot of finances on our end.” JR further attested and said,

Applying for the NCLEX is not cheap and if you fail, that's a lot of money... You really need to focus on how to apply properly, because if anything goes wrong, you have to repeat or resend the application requirements and that takes time and money.

The application process can be done either independently or through the assistance of employment placement agencies. Availing yourself of the services of these agencies will ease the physical burden on the NCLEX-RN applicant but it will cost more. King shared her experience with doing the application process on her own,

I didn't ask for the review center's assistance during the processing or registration. Nothing. I did it personally. So, I had to research everything on my own. Registration, ATT, until I took the exam. But then you have to use the resources that you have. And just comply with those references and you have questions ask as much people as you can who knows about NCLEX.

On the other hand, Pong disclosed her experience with an agency that processed her application while she was working in Qatar,

I used NEAC for processing my documents so they are a little pricey. I could not buy the things that I wanted here at that time. So that's it. Financial problems. It came to a point during my preparation for the NCLEX, um, I stopped paying for three months because I could not pay them. I had no money to send them. That is one of the factors or problem that I encountered.

Furthermore, even applicants who were already residing in Canada found the NCLEX-RN application process tough and expensive. Mel revealed an issue that is unique for

NCLEX-RN application in Canada, “There is a lot of frustrated nurses to upgrade in Canada because it is really tough unlike in U.S. because of the curriculum that is not compatible in Canada. It is really tough.”

Overall, most of the participants described negative experiences with the NCLEX-RN application process. These experiences were ascribed to the numerous requirements that were needed as an IEN, the inefficiency of the bureaucratic system of the Philippine government for procuring documents, the exorbitant processing costs, and the problem of comparability of Philippine nursing education with that of Canada. While the U.S. recognizes the nursing education from the Philippines as comparable to U.S. nursing education, Canada does not grant such privilege to Philippine-educated nurses.

Subtheme 3: Regulatory requirements. Related to the NCLEX-RN application process are requirements that the U.S. federal and state regulatory agencies place on applicants that must be completed prior to granting eligibility to take the NCLEX-RN. These eligibility requirements are different from IEN compared to U.S.-educated nurses. The CGFNS Certification Examination (CEEx) or Credentials Evaluation (CEv) and English proficiency examinations are requirements for IEN who are applying for NCLEX-RN. These requirements are rigorous, time-intensive, and expensive, which can be stressful to the applicants. KD stated, “I tried to do the internet and everybody for materials, asking from friends but I cannot, I cannot put it all together, how to start initially, because you cannot do the exam without being eligible to take the exam.”

CGFNS. A major requirement for NCLEX-RN eligibility is the CGFNS examination or credentials evaluation, which differs among applicants based on the year and state of NCLEX-RN application. Jan recalled,

Oh, when I was studying, I was also processing my CGFNS application and I have received emails regarding issues on the requirements. That increased my anxiety because instead of focusing on my review, I was thinking about the CGFNS requirements. What if I won't be able to meet the requirements? Then I won't be able to take the NCLEX.

Issues related to the cost of the CGFNS examination and credential evaluation and issues of comparability of nursing education between countries were obstacles for IEN. As Angel said, "Since we are international nurses, we have to have our credentials evaluated and it takes money to do it." Mel revealed a different experience that is unique to applying for NCLEX-RN in Canada,

Because I did the equivalency for CGFNS as in the U.S. and my education is compatible while in Canada, I am only equivalent to an LPN and my RN is not comparable. And I need 5 subjects to bridge the gap. Yes, Canada is a pain in the butt when it comes to upgrade.

The financial implications and differences in credential evaluation requirements between the U.S. and Canada were two concerns that the participants expressed as obstacles in their NCLEX-RN preparation.

English proficiency exams. The U.S. boards of nursing require passing an English proficiency examination such as the IELTS or TOEFL to become eligible for the NCLEX-RN. Like the CGFNS CEx or CEv, this is an additional requirement for IEN that

is equally expensive and difficult to pass. Anne reported the challenges she had in passing the TOEFL,

I think it's more like on the overall requirements to have the RN license, like if they will ask for English requirements before you're going to take your NCLEX. 'Cause I had a hard time passing that too. I had to take my TOEFL twice because of the speaking part,

alluding to the difficulty of the Test of Spoken English component of the TOEFL that is a hindering factor. Mel, who applied for NCLEX-RN in Canada shared her experience with the National Nursing Assessment Service (NNAS),

The process for application for the NNAS is tough specially for the language exam. You need to have a high score to pass. The score that they need it is almost a perfect score. And also, the process for applying at NNAS is expensive. The application process and then they ask is \$600 and the entire application process is almost CAN \$1500.

The lengthy process, cost, and difficulty passing these regulatory requirements became hindrances for the participants during preparation for the NCLEX-RN.

Theme 6: Living in a Bigger World

Under this final theme of hindering factors, economics, immigration, and bureaucracy played crucial roles in the participants' NCLEX-RN experience. Thus, the three subthemes: 1) *Economics*; 2) *Immigration*; and; 3) *Bureaucracy*. Table 17 presents the theme, subthemes, and codes related to *Living in a Bigger World*.

Table 17. Theme, Subthemes, and Codes of Living in a Bigger World

Theme 6	Living in a Bigger World		
Subthemes	<i>Economics</i>	<i>Immigration</i>	<i>Bureaucracy</i>
Codes	Finances Socioeconomic status Lack of nursing jobs Need for global migration Regional economic crisis	U.S. visa retrogression	Inefficient system

Subtheme 1: Economics. Economics was the most common subtheme described as a hindering factor for Theme 6. Financial difficulties, socioeconomic status, lack of nursing jobs in the Philippines, need for global migration for economic reasons, U.S. economic recession, and regional economic crisis were consistently mentioned as factors that had a significant direct or indirect impact on the participants' NCLEX-RN experience. Samantha said, "...actually it was not my plan to take the NCLEX because I'm in...that was during the recession," referring to the U.S. economic recession that lead to visa retrogression for IEN. The high cost of preparing for the NCLEX-RN, which included review fees and associated expenses such as lodging, transportation, and food expenses during the review, application for CGFNS CEx or CEv and English proficiency exams, procurement and mailing of application documents, travel expenses for international testing that included visa application, air transportation, and hotel accommodation, were barriers reported by the participants. For Em, it was an obstacle as he shared,

Financial, because since I am working abroad and I have to take the NCLEX back in the Philippines, I need to save money like to pay for your flight and also for the application to New York and it is not cheap, so you will have to save for it.

Their socio-economic status in the Philippines, which prompted participants to work overseas to provide financial support to their families served both as an inspiration and a hindrance. It was a hindrance to their NCLEX-RN preparation because of work and family-related responsibilities. Angel, who works as a nurse in Saudi Arabia, shared, “I don’t want to go home in the Philippines because I’ve been used to earning this much here and I couldn’t find that earning back home. Unfortunately, that is the reality.”

The lack of clinical experiences due to lack of nursing jobs in the Philippines was identified as a hindrance in studying for the NCLEX-RN. “...the reality is I was in this situation for a long time because the competition among hospitals was tough that time. They were freeze hiring...,” JR recalled about the surplus of nurses and lack of jobs in the country in the mid-2000s. Angie recalled and shared a similar experience, “And also at the time there were a lot of nurses, so there was no hiring at the time in our place. There was a surplus of nurses.” This situation created lack of opportunity for some of the participants to gain clinical experience prior to taking the NCLEX-RN, a factor that was beneficial for some. Furthermore, the regional economic crisis in the Middle East prompted some participants to move to other countries, which affected their career goals and timeline for NCLEX-RN preparation.

Subtheme 2: Immigration. The visa retrogression that started in the later parts of 2000s influenced the participants’ motivation, goal, and timeline for the NCLEX-RN. Angie’s plan to prepare for the NCLEX-RN was affected by visa retrogression and stated, “Because at that time, I want to go to the U.S. soon. But sadly, I think in 2007 or 2008,

the U.S. had retrogression so it was closed. I was stuck in the Philippines for 10 or 11 years...” Pong shared a similar reasoning,

I was discouraged by the fact that going to the US takes a lot of time, years because I have a brother-in-law that took him 10 years before he reached the US. So, I thought I feel like I don't want to take the test because it is so time consuming.

Some participants’ decision to prepare for the NCLEX-RN was attributed to the hiring opportunities in the U.S. and the availability of work visas or employment-based immigrant visas for IEN. For them, there was no urgency to take the NCLEX-RN if there are no job opportunities in the U.S.

Subtheme 3: Bureaucracy. The difficulty of processing the NCLEX-RN application documents in the Philippines was related to the inefficiency of some government offices in the country. Yohan recalled this difficult process, “I understand the requirements but what made it more difficult for us is the processing back then in the Philippines which was inefficient.” The bureaucracy in the Philippine government complicated an already difficult application process which resulted in a negative experience among the participants. Although only one participant specifically mentioned inefficiency of the government offices, other participants alluded to the complexity and difficulty of the overall application process. The significant role that these stages of document processing play in the overall NCLEX-RN application process warrants its inclusion as a subtheme.

In summary, the hindering factors that the participants experienced when preparing for the NCLEX-RN were classified into six different themes. The theme *Being*

Filipino identified certain Filipino characteristics, language, and contextual factors such as being married and healthcare work experiences as hindrances on their NCLEX-RN experiences. *Being Overwhelmed* is a theme that pointed to the presence of psychosocial factors like anxiety, distractions, pressure, and stress and negative attitudes like lack of focus that became obstacles to a positive experience. The theme *Ineffective Learning* pertained to ineffective learning strategies, inadequate resources such as time, finances, and study space, and competing demands from work and family that hindered effective NCLEX-RN preparation. *Training as a Global Nurse* presented academic factors in the Philippine nursing education system that were hindrances in NCLEX-RN preparation. Moreover, this theme identified the areas of weaknesses that the participants experienced during the NCLEX-RN preparation. The theme *Regulating Nursing Practice* showed how the PNLE, NCLEX-RN application process, and regulatory requirements became a hindrance on the overall NCLEX-RN experience. Lastly, *Living in a Bigger World* described economic factors, immigration, and bureaucracy and their negative impact on the participants' NCLEX-RN preparation.

Research Question 4: What strategies did IEN use to overcome the hindering factors while preparing for the NCLEX-RN?

There are four themes that described the strategies that the participants used to overcome the hindering factors encountered during NCLEX-RN preparation. These themes include: 1) *Resource Management*; 2) *Management of Learning*; 3) *Psychological Preparation*; and 4) *Self-Improvement*.

Theme 1: Resource Management

Most of the hindrances to NCLEX-RN preparation were related to inadequate resources such as finances, time, human resources, review materials, and study space. The theme *Resource Management* refers to the different strategies used to address these inadequate resources. It is categorized into four subthemes: 1) *Financial Management*; 2) *Time Management*; 3) *Human Resource Management*; and 4) *Environmental Management*. Although review materials are considered as resources, they were included in a separate theme that pertains to use as learning tools. Table 18 presents the theme, subthemes, and codes related to Resource Management.

Table 18. Theme, Subthemes, and Codes of Resource Management

Theme 1	Resource Management			
Subthemes	<i>Financial Management</i>	<i>Time Management</i>	<i>Human Resource Management</i>	<i>Environmental Management</i>
Codes	Financial support	Concrete planning	Human resources	Quality
	Saving	Balance	Online resources	Accessibility
	Installment		Agencies	
	Working overtime			

Subtheme 1: Financial management. The most common subtheme for *Resource Management* pertains to financial management strategies due to the expensive cost of applying for the NCLEX-RN. To ensure adequate finances to complete the application process, the participants primarily received financial support from their families and relatives, while others relied on savings, availed themselves of loans and installment payments, and worked overtime. Yohan shared, “so the support came from my parents

and relatives as well, yeah, I had to borrow a little bit of money to be able to process my papers,” and JR who had a similar experience, said, “It's an obstacle but I was able to overcome it because I had social support from relatives who financed.”

The participants consistently considered the entire NCLEX-RN experience as a very expensive journey that required significant attention to financial management, as Pong stated, “...you need to prepare financially as well because I think NCLEX is very expensive for us nurses.” This preparation entailed saving and working extra shifts to afford the different requirements that are needed for NCLEX-RN eligibility and for the exam itself. Angel recalled, “...installment payment is really a great help...before the payment due I would do extra work or extra load. I would...so that I can commit on that payment.” This mode of payment was a strategy that also worked well for Pong, who said, “...you don't have to pay it all at once. You only pay gradually.” Maintaining a frugal lifestyle also helped participants with budgeting finances. Furthermore, financial management was a crucial strategy because most of the participants who worked overseas allocated part, if not most, of their salaries for their families in the Philippines.

Subtheme 2: Time management. Lack of time due to work and family responsibilities was a major concern that negatively impacted the NCLEX-RN preparation experiences. As Nicole said, “I have to balance between family, work, and studying as well. So, you have to have, to follow a schedule a structured schedule.” Efficient use of time, making concrete plans and structured review schedules, maintaining life-work-study balance, and studying during “willingness time” were time management strategies that the participants found helpful. For Em, his *willingness time*

was the best time as he didn't feel compelled to study. "So how did I overcome the conflict with schedule? I took my *willingness time*." He described this time as "being in the mood to study".

Time became a luxury for most of the participants and finding blocks of time to study became a habit. Angel described how she valued time during her preparation for the exam,

I tried to put in some time like, even when I am washing the dishes, I have a sticky note somewhere where I can see because even just for five lab values, that makes me use my time to study. And also, at work, I use breaks in between the study...one good thing about the cellphones these days is that there's a lot of applications. Those applications that have practice NCLEX questions. I use them during my work breaks and even when I am waiting for my husband. And also, for my travel time because it takes me about 30 minutes to and from work that also gives me an hour to study.

Time management likewise entailed having a concrete plan, commitment to follow the plan, and setting deadlines to implement the plan. Em described his concept of concrete planning and setting deadline as a time management strategy,

...you really need to have a deadline for yourself. So, I think that's how I conquered my...until when? Because you can keep on studying but when are you going to stop reviewing and take the exam?

Anne shared a related experience,

The bottom line is, no matter how tired you are, if your goal is like to pass the NCLEX and you signed up for it, not like, just like thinking, "Oh I'll do it or not do it." I think if you're like determined to do it, you need to set aside a certain time for it.

Setting a structured schedule required a certain level of motivation and self-discipline to be able to focus on the review preparation. “I really need to focus and study, that was my routine every day. Even during my days off all I do is study,” Mac said. In essence, the ability to recognize time limitations and implement strategies to use time efficiently helped the participants in addressing a major factor that was a hindrance to their NCLEX-RN preparation.

Subtheme 3: Human resource management. *Human Resource Management* refers to the support provided by family, relatives, peers, co-workers that was used to resolve an obstacle during the NCLEX-RN preparation. Application processing agencies likewise provided logistical support for those who needed help with the application process. Family members and relatives served as providers of physical, emotional, and financial support. For instance, their physical support was crucial in resolving transportation issues to and from their homes and review center, in helping with childcare concerns, and in providing assistance when travelling to take the NCLEX-RN in an international testing site. Emotional support was helpful in allaying the participants’ test anxiety and in providing comfort during and after the exam.

Mel shared how she negotiated for her spouse’s support to address her main obstacle while reviewing – childcare, “I tried to talk to my husband if he can have a day off at least once a week, Wednesday or Friday, work from home so I can study.” Mac, who was based in Dubai when he was applying for the NCLEX-RN, benefitted from a peer when his parents were unable to process his application documents on his behalf. He shared, “I had to ask favor from a friend who lives in the city to process my paper is on

his day off.” Likewise, colleagues can be a source of support while studying like in the case of Anne, who argued that one of the reasons for an IEN failure in the NCLEX-RN is the lack of resource persons when preparing for the exam. She said, “So, we did like formed a small group in my old job. So, the three of us studying together. That helps too.” Furthermore, seeking the assistance from other IEN who have undergone the NCLEX-RN application process became a helpful resource to the participants. The various types of support that were provided by these different individuals were helpful in addressing some of the barriers that the participants encountered during their NCLEX-RN preparation.

Subtheme 4: Environmental management. *Environmental Management* refers to the strategies that the participants employed to ensure a conducive study place while studying for the NCLEX-RN. This involved appropriate selection of a review center, dormitory, or boarding house based on needs, accessibility, or comfort. For some this simply involved modifying their review schedule to control noise and distractions within their immediate home environment. For others, it entailed moving to a different city or province to study for the exam or travelling to a foreign country to sit for the exam. As Jackie shared, “I had to go to the summer capital, Baguio City. I think that is the most comfortable for me to review.” The city is the summer destination in the country due to its cooler climate.

The choice of study spaces was crucial to the effectiveness of the participants’ review and testing. One participant was left with no choice due to the lack of a review center in his hometown. JM, recalled how he left his hometown, travelled almost 300

miles, and managed the stress of a daily commute from his boarding house and the review center to have a study space. He reported,

There is no other way to overcome it but to suck it in, the one to two-hour ride with a jeepney and suck it in. But I survived...So, location, location is very important. Location, location, location of the review center or your study workplace.

Angel said that choosing a convenient location during the testing was an important consideration,

Also in terms of preparation, like I have to book for my hotel...and uh I make myself familiar with the place of the exam itself... I researched for the test center where I am, the near hotel or house or the room that I can rent that it doesn't require me to travel more.

Whether it was a study space for the actual review or the environment near the testing site, the participants valued their environment as a means to have a positive NCLEX-RN experience. Overall, financial, time, human resource, and environmental management strategies were types of interventions that the participants used in addressing barriers to their NCLEX-RN preparation.

Theme 2: Management of Learning

The theme *Management of Learning* describes the participants' study habits, review strategies, and use of review materials as strategies to promote effective learning. The two subthemes are: 1) *Effective Study Habits*; and 2) *Use of Review Resources*. Table 19 presents the theme, subthemes, and codes related to Management of Learning.

Subtheme 1: Effective Study Habits. The participants developed and implemented effective study habits as learning management strategies to address issues

related to ineffective studying. Answering NCLEX-RN practice questions was the most common learning strategy followed by reading nursing content. Participants argued the effectiveness of both approaches.

Table 19. Theme, Subthemes, and Codes of Management of Learning

Theme 2	Management of Learning	
Subthemes	<i>Effective Study Habits</i>	<i>Use of Review Resources</i>
Codes	Practice test questions	Print resources
	Focus on content	Online resources
	Reading intently and notetaking	Licensure exam notes
	Translation	Advance nursing degree notes
	Familiarize with the unknown	Review Center
	Clinical application	
	Seeking clarification	

JM advocated for understanding content, “I don't believe in answering practice tests will make you successful in NCLEX. Content is very...very...fundamentals is very important,” an argument that Yohan refuted,

I don't have the concentration skills to finish a whole book...just reading through it. So again, I just focused on answering as much questions as I could and from there if I didn't know something from the rationales of the answers, I took, that's the only time I actually go back to the book.

Additionally, Angel agreed with Yohan and said, “I know it's different for others because for them they would read first, then take a practice test, which is the opposite of what I do.” Taking a practice test was also Dawood’s main strategy, “...every day at least 75 items per day, even when I am tired, whatever it is, whatever duties I have, I make sure I spend 2-3 hours...” The decision to choose between reading and answering questions was highly individualized and mainly depended on learning styles and needs.

Structure was also an important component of having an effective study habit. Many participants followed a schedule, a ritual, and a goal to guide them in their review. Jackie said, “Six weeks, I remember six weeks focus before the date, I don't go out with my friends. I tried to focus. I have to wake up at this time. I have routine.” Part of this habit is goal-setting as Samantha practiced, “So, when I try to answer 200 questions, what I do for the first 50 questions I answer them, I study the answers and read the rationales, understand.” Angel was a minimalist in answering questions and shared, “Even if that's just five to 10 questions a day, I make it as a habit. You have to make it a habit that even if it's just a few questions every day, that helps.” Apparently, it is not the number of questions answered or number of pages read that mattered; instead, it's the consistency in studying and maintaining a routine that were important in maintaining effective study habits.

Those who struggled with comprehension of the English language used creative strategies like reading intently and identifying keywords and root words, translating English into Filipino or their native dialects and restating the sentence to improve comprehension. For comprehension issues related to nursing content, interventions such as writing notes in own words, mumbling to oneself, drawing on white boards, and involving co-workers in discussions during work hours helped the participants understand difficult concepts. Use of sticky notes, posters, and mnemonics to help with retention were also commonly used. Angel shared how she devised ways to improve her retention, “...when I read, like for arterial blood gas, I have to mumble and explain it to myself in order for me to understand and remember.” She further shared another learning strategy,

...when I read from the textbook, I still make my notes and write them in a way that I will understand because that way, I will be able to grasp the information better and have a better retention of information. I think it's my hand that has a memory and not my brain. (laughs).

Mac remembered his unique learning strategy of asking questions to his roommates and co-workers as a way to enhance retention,

Because if it's really hard for me to retain but I remember I asked this from you and I asked this on this person, then I will be able to remind myself that, oh, that was the information that we talked about and I will be able to retain it better.

While some participants blamed work schedule as an interference of their review, other participants incorporated their patient workload as part of their review structure. Either they studied a particular concept then applied it at work the following day or they focused and learned from their patients' cases by asking questions from the physicians during their work hours. Mac added,

When we have interesting cases in the ER, I studied the case, I asked the doctor about the management of the disease process, I observe how do you manage it and when I learn about its management, I really study that case. I study the pathophysiology, I studied the management and I review how, what I observe in actual practice correlates with what is in the book that I am reviewing. That way I can retain more information.

It was apparent on the participant's responses that most of them actively sought strategies that would help them study for the NCLEX-RN, considering their overall contextual situation, work schedules, and learning limitations.

Subtheme 2: Use of review resources. The participants used a variety of resources during their NCLEX-RN preparation including, print, online, and multimedia

resources. Their choice of resources was based on contextual situations, learning needs, individual preferences, cost, popularity of the review material based on personal and social media recommendations, and trends in the NCLEX-RN. Dawood shared the variety of review resources that he used,

Everyday 75 items, with these audios, the Klimek audios, and yes, social media, social media also helped a lot. Like Lefora, like your page (Nursing Review page on Facebook), I also find it challenging still but it helped a lot.”

On the other hand, Anne relied on a few resources as she shared, "I did self-review most of the time and then it's mostly basing on the instructional materials that I had when I was a student.”

The participants were able to compare the usefulness and effectiveness of difference resources. Mel said, “I availed the NCSBN review to study more on that. Actually, I can say that NCSBN, is way more closer to the questions with NCLEX compared to the other references.” Pong shared how she maximized the use of her resources, “First I read the comments in the Lefora group and also from my friends and colleagues here in Doha, Qatar how they have prepared for the NCLEX,” referring to the online support group for Filipino nurses planning to migrate to the U.S. The participants’ resourcefulness and assessment of their learning needs enabled them to choose the right review materials for them.

Contextual differences played a major role in deciding whether to study independently (self-review) or enroll in a review center. In the case of Jackie, she shared,

At first, I did self-review but I was not doing good on my practice tests, so I had to enroll in a review center...Self-study gave me the confidence because I have the basics like fundamentals of nursing. But the review center, it coached me on concepts that I do not understand.

Work schedule and unavailability of a review center were two reasons for engaging in self-review. As Dawood said, "I did self-review. I did not go for an online review center. I did self-review because I don't have the luxury of time." Additionally, family responsibilities and childcare were also identified as reasons to study independently.

Those who had access to a review center enrolled in these centers for their NCLEX-RN preparation. It is a popular option in major cities in the Philippines and in a few international locations. Some participants attended one-month to three-month lectures depending on individual needs. To meet his learning needs, JM said, "I enrolled in the Kaplan review program and it took three months." The participants primarily benefited from test-taking strategies and familiarization with the NCLEX-RN test plan and the U.S. healthcare system by enrolling at the review centers.

For a few, initiative and self-directedness helped them identify their needs and look for resources to meet their needs. For some participants, the absence of a review center, internet access, or online resources didn't hamper their determination to study for the NCLEX-RN. They resorted to going to a different city that has a review center or used alternative resources such as books, lecture notes, or multimedia resources such as CDs and VHS tapes for recorded lectures in the absence of an internet connection or online resources. Overall, the participants had a multitude of print and online resources

to choose from and their choice of resources was largely influenced by their usefulness and individual contextual situations.

Theme 3: Psychological Preparation

The theme *Psychological Preparation* refers to the use of psychological interventions to resolve psychosocial-related issues that negatively influenced the participants' NCLEX-RN preparation. This is further described under the three subthemes: 1) *Positive Mindset*; 2) *Focus and Control*; and 3) *Self-assessment*. Table 20 presents the theme, subthemes, and codes related to Psychological Preparation.

Table 20. Theme, Subthemes, and Codes of Psychological Preparation

Theme 3	Psychological Preparation		
Subtheme	<i>Positive Mindset</i>	<i>Focus and Control</i>	<i>Self-assessment</i>
Codes	Set goals Be inspired Be motivated Be committed	Self-discipline Parental discipline Controlling distractions	Know your limitations Make adjustments Appreciate learning Recognize differences Take risks

Subtheme 1: Positive Mindset. *Positive Mindset* entails having a positive outlook in life and the ability to develop positive perspectives out of adversities. This mindset involves having a goal and the right inspiration, motivation, and commitment to achieve that goal. When faced with distractions, pressure, or stress, the participants reflected on the goal of taking the NCLEX-RN and thought of their families who were the main motivation and inspiration for passing the exam. Realizing that they had a major goal to achieve, this enabled them to commit themselves to study in order to achieve their goals. Work-related stressors didn't deter Pong from pursuing her goal. She said,

Although I'm being thrown with problems in the hospital as well, but your conviction that you need to finish this, that this is your goal, that this is the time that I will really take the exam. It's like take it or leave it.

Jackie shared her positive mindset in the midst of her challenges, "But with hard work and determination, strong faith, and a positive outlook that you can make it even though you are faced with hardships. I just did my best and leave to God the rest."

Their motivation to pass the NCLEX-RN as a key for a better future helped the participants develop a positive mindset. Dawood kept on reminding himself of his motivation as he shared, "Firstly, the motivation, the motivation that I will have a great future if I will be admitted in the States," referring to the NCLEX-RN as the key for a great future. King had a different motivation to pass her NCLEX-RN when she mentioned, "I'm thinking of the financial implications because NCLEX is expensive. So that has become my goal to pass it on the first time." Regardless of the nature of the barriers confronting their test preparation, the positive outlook of the participants was helpful in finding resolution to these barriers.

Subtheme 2: Focus and control. The word *focus* had different connotations among the participants. Nevertheless, they consistently referred to focus as the ability to concentrate on their tasks of studying and goals of passing the NCLEX-RN and migrating to the U.S. whenever they experienced challenges. The participants referred to focus in reference to their goals, family, review, and study habits. Jan said, "I need to focus on my goal. Even how hard it is even how far it is, if you're willing to do it if you're willing to surpass it you will do it even if it's hard. Just keep going." Yohan, who considered his two-hour daily commute as his daily struggle, said, "When I arrive at the review center, I

have to reset myself and refocus and just do the job.” Mac, who allotted a year to prepare while working full-time in Dubai, reported, “I really need to focus and study, that was my routine every day.” The commitment and dedication to meet their goals enabled participants to focus more on their NCLEX-RN preparation.

The participants described control in the context of self-imposed discipline and parental discipline as a means to reduce or limit distractions that were negatively affecting their NCLEX-RN preparation. The word control was well articulated by Angel when she said,

And I really go with that belief that go for the things that you can control. Control it. Like you are the best controller for the things that you can control. And for the things that you can't, let it go because you can do anything about it. The more you try to hold onto it, it will be more difficult and you can't move on.

Furthermore, Angel stated, “...decrease the things that makes you stressed, like the things that you can control, like the time, the travel, the...of course the privacy...”

Self-discipline was an important part of their preparation, as Angie said, “Building a discipline to study. Just refocus again. Your personal discipline to really study even at that young age.” Parental discipline also helped them achieve a better sense of control, like in Yohan’s case he shared, “And as far as having the time of my life thing, the discipline of my parents and just to be focused on my goal. Yeah those are the strategies that I did to overcome those distractions,” referring to peer pressure as an obstacle as a fresh college graduate when he prepared for the NCLEX-RN. The ability to set control on themselves was perceived as an effective strategy in dealing with challenges during NCLEX-RN preparation.

Subtheme 3: Self-assessment. As a psychological management strategy to deal with hindrances to the participants' NCLEX-RN experiences, self-assessment enabled participants to identify limitations of their knowledge and contextual situation, to make adjustments on circumstances that are beyond their control, to appreciate learning while addressing their gaps in knowledge, and to take risk in the midst of challenges while trusting their capabilities.

Jan, who was overwhelmed and needed direction on starting her review preparation shared how she searched for online groups to learn about the practices of other NCLEX-RN candidates in the U.S., "I did that in order to assess myself, to compare my preparation so that I will be able to know what to do." When faced with multiple professional tasks as he was preparing for the NCLEX-RN, Blue developed a deeper insight about himself as he expressed, "I learned a lot about myself, you know, managing my time, balancing my work commitments and as well as time I spent for the review." In assessing her learning while studying for the NCLEX-RN, KC had to modify her learning strategies and said, "I feel like I wasn't learning so I had to revert back to what you guys were doing and go back the textbook and understanding what was going on," indicating the use of her old notes when she prepared for the PNLE. Recognizing their learning needs and contextual limitations, the participants were able to implement strategies to address these needs and limitations.

In summary, developing a positive mindset, exercising focus and control, as well as conducting self-assessment were psychological management strategies that the

participants used in finding resolution to hindrances that were encountered during the NCLEX-RN preparation.

Theme 4: Self-improvement

The theme *Self-improvement* describes behavioral strategies that the participants used to deal with barriers to their NCLEX-RN preparation and it includes three subthemes: 1) *Devotional Prayers*; 2) *English Competency Improvement Strategies*; and 3) *Healthy Lifestyle*. Table 21 presents the theme, subthemes, and codes related to Resource Management.

Table 21. Theme, Subthemes, and Codes of Self-improvement

Theme 4		Self-improvement	
Subtheme Codes	<i>Devotional Prayers</i> Prayers	<i>English Competency</i> <i>Improvement Strategies</i>	<i>Healthy Lifestyle</i>
		Reading Translation Rewording Watching movies/TV	Breaks Food Sleep Exercise Spa/Salon

Subtheme 1: Devotional prayers. Prayers emerged as one of the most common strategies used by the participants in dealing with the challenges that affected their NCLEX-RN preparation. Reflective of their culture as a predominantly Catholic country, the participants used prayers as a strategy throughout their test experience – before, during, and after the test.

Participant quotes that reflect use of prayer as a strategy include:

Actually, out of the 75 questions that I answered I could probably remember very few because it was like they were out of this world kind of questions. The very

first question was a SATA question, and I was surprised. And since I usually pray before the exam, the moment I saw the first question I closed my eyes again and prayed. I said Lord I'll leave them up to you, I know I prepared myself for this. (Mac)

Of course, prayers. I mean, Prayers, it's a big thing for me. It helped, it really helped me... I guess I had faith at that time. I mean I was more religious at that time. I had faith. (Blue)

And number four, of course, we need the guidance of God. We cannot achieve anything without the guidance of God. So pray and ask from God. Always be humble we should not only rely on what we know but we should also rely on spiritual guidance from God. So those are the four factors, the support, study space, the motivation and God. (JM)

Prayers. Prayers sir. Prayers. Really prayers. We are Filipinos. Roman Catholics. We still go down, put our heads down, and thank God for everything. Because I always tell myself, "If the process is smooth, it is meant to be. If there is a lot of hindrances, stop. Maybe it's not the right time. (Angel)

I believe that there is a God that always help you. Spiritually, I have a very strong faith and that teaches me what I cannot do during the exam. (Jackie)

The participants had a strong faith and a deep sense of spirituality and they used this as a powerful intervention in dealing with challenges. Additionally, the participants used prayers to reduce anxiety, increase self-confidence, and seek guidance in answering test questions.

Subtheme 2: English competency improvement strategies. The participants who reported that the English language was a hindrance to their NCLEX-RN preparation used various strategies to cope with this barrier. These strategies involved constantly reading English books and journals, watching American movies and medical-themed TV shows, reading nursing content and NCLEX-RN practice test questions intently and

dividing sentences in segments while identifying keywords and root words, and rewording or translating English to Filipino or a native language.

KD's approach involved rewording which she described as,

...you reword it into your own sentence in a way that is easy to understand. Like if it is stated on your own, it would be easier to understand. For me, that's how I studied because it would be easier to absorb the information.

Angel reported that she benefitted from translation and shared her strategy,

So, I have to create words in my native dialect that rhyme on something that will help me remember about the disease process. Sounds like, hears like, things that will help me remember them. Strategizing in my mind some things that will help me retain concepts. (Repeated some Ilonggo words several times as examples to remember Cushing's and Addison's). I will look for words in Ilonggo that will help me remember.

Mel described her approach, "For me I need to sometimes read it three times or sometimes four times to comprehend and I need to break it down...I need to break it down and analyze, which is missing, what is it asking for?"

The participants' ability to recognize their limitations in proficiency with the English language and their creativity in designing individualized strategies that suited their learning needs were evident in the descriptions of their experiences. Though they reported that this is an issue, participants did not mention it as a reason for failing the NCLEX-RN.

Subtheme 3: Healthy lifestyle. Acknowledging the importance of maintaining a healthy lifestyle while preparing for the NCLEX-RN, the participants reported eating

healthy diets and comfort foods, taking breaks during long review hours, engaging in exercise, having adequate sleep, and going to the salon or spa as part of their preparation.

Jackie shared her strategies to maintain a healthy lifestyle, “I have to wake up at this time. I have routine. Then I balance as well, I exercise, at the same time a balanced diet.” Samantha valued break time when studying as she stated, “I set my goal, like after 50 questions, I need to get up, I need to watch TV, be on Facebook or eat something sweet. Yeah, it helped me refresh my mind.” Two participants appreciated the benefits of coffee as Anne said,

I should be in Starbucks (laughs). Drinking my coffee something like around 3:00 to 5:00 PM. I never wanted to review at home because I will see my chores or the bed, so I feel like sleeping so it's better for me to be like somewhere.

Dawood agreed and said, “And coffee, I always make sure I have coffee on the table and a piece of bread...” As nurses who believed that these strategies promote physical health, the participants also reported these actions helped them improve concentration skills, reduce anxiety, and maintain overall well-being.

Overall, the participants instituted a variety of strategies to overcome the hindrances of their NCLEX-RN experiences. These strategies related to management of resources, learning, and the self, and these were divided into four themes: 1) *Resource Management*; 2) *Management of Learning*; 3) *Psychological Preparation*; and 4) *Self-Improvement*. Resource management strategies focused on addressing human resource, time, financial, and environmental related hindrances while learning management strategies involved use of effective study habits and use of review resources. Finally,

psychological strategies consisted of positive mindset, focus and control, and self-assessment and self-improvement strategies comprised of prayers, improving English competency, and engaging in a healthy lifestyle.

Summary of Research Findings

This last subsection of Chapter IV presents the overall summary of research findings. For research question 1, What are the experiences of IEN while preparing for the NCLEX-RN?, the participants' NCLEX-RN experiences, labeled as *My NCLEX-RN Journey* (Theme 1) were described as positive and negative experiences, which were categorized in two subthemes, *A Good Journey* and *Not an Easy Road*, respectively. An unexpected finding about the meaning of their NCLEX-RN experience emerged and was considered as a separate theme, *My Meaning of the NCLEX-RN* (Theme 2) with two subthemes, *The American Dream* and *It's an Investment*.

For research question 2, What are the facilitating factors that IEN experienced while preparing for the NCLEX-RN?, six themes described the facilitating factors that the participants experienced when they prepared for the NCLEX-RN. *Being Filipino* (Theme 1) described their ethnicity as Filipino and their culture as global nurse migrants. *Being Positive* (Theme 2) presented the influence of mental preparation, positive attitude, and critical thinking on their NCLEX-RN experiences. *Learning Effectively* (Theme 3) identified the role of study habits, strategies, and resources while *Training as a Global Nurse* (Theme 4) acknowledged the influence of their academic preparation on their overall NCLEX-RN experiences and outcomes. *Regulating Nursing Practice* (Theme 5) recognized the role of NCLEX-RN application requirements and processes for IEN in

facilitating the NCLEX-RN experience. *Living in a Bigger World* (Theme 6) presented the influence of economics, socio-cultural factors, and immigration factors on the participants' NCLEX-RN experiences.

For research question 3, What are the hindering factors that IEN experienced while preparing for the NCLEX-RN?, six themes identified the hindering factors that the participants experienced when preparing for the NCLEX-RN. *Being Filipino* (Theme 1) identified negative Filipino characteristics and contextual situations as hindrances on their NCLEX-RN experiences. *Being Overwhelmed* (Theme 2) described the influence of psychosocial factors and negative attitudes on the test experience. *Ineffective Learning* (Theme 3) pertained to ineffective learning strategies, inadequate resources such as time, finances, and study space, and competing demands from work and family responsibilities that hindered effective NCLEX-RN preparation. *Training as a Global Nurse* (Theme 4) identified academic factors that were barriers in NCLEX-RN preparation. *Regulating Nursing Practice* (Theme 5) ascertained the NCLEX-RN application requirements and process as a hindrance on an IEN NCLEX-RN experience. *Living in a Bigger World* (Theme 6) described the negative influence of economics, immigration, and bureaucracy on the participants' NCLEX-RN experience.

For research question 4, What strategies did IEN use to overcome the hindering factors while preparing for the NCLEX-RN?, four themes related to management of resources, learning, and the self, answered this research question. *Resource Management* (Theme 1) presented strategies to address barriers related to human resources, time, financial, and environment. *Management of Learning* (Theme 2) were interventions used

to promote effective study habits and efficient use of review resources. *Psychological Preparation* (Theme 3) consisted of strategies that promoted positive affective and cognitive behaviors. *Self-improvement* (Theme 4) are strategies that involved prayers, English language improvement, and healthy lifestyle practices.

The discussion of these research findings and their link to the existing literature about the NCLEX-RN experience will be discussed in the next chapter. Furthermore, the following chapter will explain the implications of the research findings for nursing education, nursing practice, and nursing research and will present the conclusions and acknowledge the limitations of this research. Finally, based on the findings of this study, the succeeding chapter will provide directions for future research in the area of IEN and NCLEX-RN preparation.

CHAPTER V

DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

This chapter presents the summary of the results, the discussion of the results, conclusions, limitations, implications for nursing education, practice, and research, and recommendations for future research. It is organized into the following sections: 1) summary of the results; 2) discussion of the results; 3) conclusions; 4) limitations; 5) implications of the study, and 6) recommendations.

Summary of the Results

The low NCLEX-RN first-time pass rates (FTPR) of internationally educated nurses (IEN) and the lack of literature on this area were the rationales for this study. To develop an understanding of this phenomenon, the research aimed to explore the experiences of IEN while they prepared for the NCLEX-RN. It explored the facilitating and hindering factors of NCLEX-RN experiences and the strategies used to overcome those hindrances.

The results of this study are significant for individual IEN, Philippine nursing education, the U.S. nursing workforce, and nursing research. The research findings provide information and a deeper understanding of the multidimensionality of factors influencing IEN NCLEX-RN experiences so that interventions can be designed and implemented to increase IEN chances of passing the NCLEX-RN. As the largest group of IEN applying for the NCLEX, this study provides information that may be useful to the

Philippine nursing educational system to improve nursing curricula and improve national NCLEX-RN FTPR. Philippine-educated nurses (PEN) comprise more than half of IEN of the U.S. nursing workforce. In light of the cyclical nursing shortage and COVID-19 pandemic, increasing the NCLEX-RN pass rates of PEN can provide a significant source of IEN pipeline for the U.S. nursing workforce. Due to the lack of studies on IEN and the NCLEX-RN, the findings in this study can help develop a conceptual base for the development of knowledge in this research area.

There is limited literature that explains the reasons why most IEN fail the NCLEX-RN. Most IEN studies focus on understanding their integration into the U.S. healthcare system. Moreover, most NCLEX-RN studies were conducted on U.S.-educated nurses. The findings of this study add to the limited literature about IEN and NCLEX-RN.

To achieve the research aims, the researcher used a qualitative descriptive research design as the method to explore an understudied phenomenon. Online recruitment and purposive sampling yielded 20 participants that provided rich and thick data to explore the phenomenon under study. A semi-structured virtual interview was the main data collection used and qualitative content analysis was the data analysis technique used using Creswell and Creswell's (2018) five-step recommendations. Lincoln and Guba's (1985) guidelines were used in ensuring the trustworthiness of the research findings.

Using the NVivo 12 software program, data analysis produced 12 themes to answer the research questions. The participants reported both positive (*A Good Journey*)

and negative (*Not an Easy Road*) NCLEX-RN experiences. The meaning of the NCLEX-RN emerged as an unexpected finding as participants regarded the NCLEX-RN as an investment (*It's an Investment*) to achieve their American dream (*The American Dream*). An adaptation of the Nursing Universal Retention and Success (NURS) model was used to describe the facilitating and hindering factors of the participants' NCLEX-RN experiences. Various individual, cultural, contextual (*Being Filipino*), affective (*Being Positive* and *Being Negative*), and academic factors (*Training as a Global Nurse*) themes emerged that further explained NCLEX-RN experiences. Individual learning styles and strategies and the use of various resources (*Effective Learning* and *Ineffective Learning*) had significant influences on participants' NCLEX-RN preparation and outcomes. On a larger scale, regulatory requirements and processes (*Regulating Nursing Practice*) and macroenvironmental factors (*Living in a Bigger World*) played a role in NCLEX-RN preparatory experiences. Strategies to overcome the hindrances to effective NCLEX-RN preparation described involved efficient management of resources (*Resource Management*), developing good study habits (*Management of Learning*), having a positive mindset and attitude (*Psychological Preparation*), and self-care (*Self-improvement*).

Discussion of the Results

This section presents the discussion of the results of this study concerning the existing literature about IEN and the NCLEX-RN. It describes a personal and professional interpretation of the research findings in the light of the research questions about the IEN NCLEX-RN experience, its facilitating and hindering factors, and the

strategies that were implemented to overcome the hindrances. Moreover, it examines the results of the study within the larger context of nursing education, the nursing workforce, and nursing research.

Research Question 1: The IEN NCLEX-RN Experience

The first research question was as follows: What are the experiences of IEN while preparing for the NCLEX-RN? The researcher found that participants had both positive and negative NCLEX-RN experiences. The positive experiences were attributed to the ease of NCLEX-RN application processing, quality of the review program offered by the review centers, confidence in the subject matter, presence of a strong support system, and adequate time to study for the examination. Contextual factors such as unemployment and family support during the NCLEX-RN preparation were factors that mainly influenced positive NCLEX-RN experiences. Unemployment provided adequate time to study for the NCLEX-RN, which supports the findings of Beeman and Waterhouse (2003). The family-centered and collective nature of Filipino culture was a crucial factor that contributed to a positive NCLEX-RN experience. The provision of physical, emotional, and financial support was evident in all stages of the participants' preparatory and testing experiences. This finding supports Covell et al.'s (2017) research that claimed the presence of a good support system among IEN increased the odds of passing the NCLEX-RN.

Generally, those who enrolled in a review center had a positive NCLEX-RN experience. Review centers for national and international nursing licensure examinations are popular in the Philippines due to the vast number of nursing graduates that nursing

schools produce annually and the nature of global migration of Philippine-educated nurses (Masselink & Lee, 2010; Ortiga, 2014). These centers provide review structured review schedules, provide orientation to the U.S. healthcare system and the NCLEX-RN test plan, (Beriones, 2014), and assist reviewees on NCLEX-RN processing as part of their services, which eased the preparatory experiences of some participants and reduced the barriers to promote a positive NCLEX-RN experience and outcome. This intervention supports Williams et al.'s (2017) study on reducing barriers to promote a positive NCLEX-RN experience and outcome. The benefit of enrollment in a review center is a finding similar to Choe and Yang's (2009) study. However, the difference in this study is the participants' enrollment in commercial, not university-based review centers.

More participants described these experiences as negative due to occupational and contextual factors, as well as the nature of the NCLEX-RN exam and stringent application process. Occupational factors include lack of time due to work schedules and responsibilities, lack of clinical experience, and non-ideal healthcare work experience (HWE). Contextual factors having a negative impact on NCLEX-RN experiences reported were family responsibilities such as child care, providing financial support, and other familial responsibilities. Findings in this study substantiate earlier research (Choe & Yang, 2009; Squires, 2017) on the negative impact of family responsibilities on NCLEX-RN preparation and outcomes. Similarly, Korean IEN described their preparation for the NCLEX-RN as stressful and not easy (Choe & Yang, 2009). This

finding aligns with an IEN study in Canada that reported the licensure process as a major barrier for IEN (McGillis Hall et al., 2017).

The difficulty, obscurity, and unfamiliarity with the NCLEX-RN produced high levels of anxiety that affected actual testing experiences. These factors were the same that previously identified in prior IEN studies that negatively impacted NCLEX-RN preparatory experiences (Aiken, 2007; Alizadeh et al., 2015; Bahari, 2015; Eddy & Epeneter, 2002; Li et al., 2015; Mathew et al., 2015; Mc Farquhar, 2014; McGillis Hall et al., 2016; Petrovic et al., 2019; Roykenes et al., 2014; Salfi & Carbol, 2017). High levels of anxiety can impair one's perceptual field and can significantly affect cognitive function such as attention and concentration, which can affect test-taking skills during the NCLEX.

Furthermore, a traumatic experience occurred for those taking the 2006 Philippine nurse licensure exam (PNLE) and transition from the PNLE to the NCLEX-RN was described as difficult and stressful. The 2006 PNLE was tainted with a leakage controversy in which test item security was jeopardized. It was reported widely that this involved a commercial review center. The 2006 PNLE examinees were asked to retake the exam the following year to demonstrate proof of unblemished reputation as 2006 examinees. To some participants, this resulted in psychological trauma that persisted until they prepared for the NCLEX-RN the following year. Experiencing a traumatic experience may exert a negative influence on the psychological, behavioral, and cognitive function of an individual, which may potentially impair test-taking abilities when exposed to similar circumstances.

The participants' description of the NCLEX-RN application process as exhausting, stressful, and expensive is related to the complexity of the requirements and cost of the application process. These factors were contributory to the negative NCLEX-RN preparation experiences and this finding is consistent with previous IEN studies that claimed the NCLEX-RN licensure process is burdensome, stressful, and frustrating (Aiken, 2007; Covell et al., 2017; McGillis Hall et al., 2015; Moyce et al., 2016; Schipiour, 2016; Sherwood & Shaffer, 2014).

One unexpected but a very significant finding that emerged during data analysis was the participants' description of the meaning of NCLEX-RN. The relevance of this finding captured the essence of the study about the NCLEX-RN from an IEN perspective. The NCLEX-RN was perceived as more than just a licensure examination. The participants consistently described the NCLEX-RN experience as representing a culmination of childhood dreams, personal aspirations, and professional goals. The NCLEX-RN is viewed as an investment in the achievement of their American dreams, a concept that is common in the Filipino culture as an influence of American colonialism and ongoing influence of American nursing in the Philippines. (Choy, 2003; Jurado & Pacquiao, 2014). The participants considered the NCLEX-RN's ability to open opportunities for a better future for themselves and their families because in the Filipino cultural context, studying nursing and having a U.S. nursing license is a means to achieve personal and professional growth, a comfortable life, financial stability, and social mobility (Castro-Palaganas et al., 2017; Masselink & Lee, 2010; Ortiga, 2018). Given the historical and cultural context of nursing in the Philippines, passing the NCLEX-RN is

synonymous with a bright future – the chance to live the American dream. Moreover, the interaction between the push and pull factors in nurse migration such as better job opportunities, working conditions, a better quality of life (pull factors) and low salaries, lack of jobs, and limited opportunities for growth in source countries (push factors) largely influenced the Philippine nursing profession, in particular, and the Filipino society in general (Castro-Palaganas et al., 2017; Sherwood & Shaffer, 2014).

Compared to other countries, the promise of higher salaries, better living conditions, and the presence of opportunities for personal and professional growth made the U.S. the priority or dream destination of PEN (Castro-Palaganas et al., 2017; Marcus et al., 2014; Ortega, 2018). The Middle East is another popular destination for nursing migration that has less restrictive immigration requirements. However, its restrictive and abusive culture influenced Filipino parents to choose the U.S. as a viable and safe option for their children (Ortega, 2018).

As an investment to achieve their American dream, the participants perceived the NCLEX-RN as an investment of time, resources, and efforts, even if it meant self-sacrifice. Working full-time as a nurse and simultaneously studying for the NCLEX-RN required investment of time and financial resources. The Filipinos' value for education, hopes of living the American dream, and the communal nature of the Filipino culture families enabled Filipino families to collectively invest in nursing education hoping that their children would work in the U.S., send remittances home, and become an instrument in uplifting the quality of life of the entire family (Castro-Palaganas, et al., 2017; Ortega, 2018).

Currently, there are very limited published studies on IEN NCLEX-RN experiences. The findings of this study describing the positive and negative IEN NCLEX-RN experiences and perceived reasons for different experiences can provide an understanding of the NCLEX-RN experiences from an IEN perspective. This can be used as a basis for other IEN who are planning to take the NCLEX-RN in the future. To date there are no published studies that describe the meaning of the NCLEX-RN experience from an IEN perspective. As this finding was unique to Filipino nurses, this study can serve as a benchmark for further studies to explore the meaning of NCLEX-RN to other IEN.

Another relevant finding surfaced when the experiences of those who passed and failed the NCLEX-RN the first-time were compared. The participants who passed the NCLEX-RN the first time acknowledged the rigorous process involved in preparation, but they exerted tremendous time and effort to meet those demands. Time and stress management were more effective among those who passed the exam, which is consistent with Eddy and Epeneter's (2002) study. The availability of time was a major factor among the group who passed the NCLEX-RN the first time. More than half of those who passed were unemployed for one to two years after they graduated from college. This supports Beeman and Waterhouse's (2003) findings of the association of a long time to study and positive NCLEX-RN outcome. Almost half of those who passed took the NCLEX-RN a year after graduation. This group had a shorter time lag between graduation from nursing to taking the NCLEX-RN compared to those who failed the first

time. This finding affirms the studies of Davis and Nichols (2002) and Woo et al. (2009) that claimed longer time lag decreases the chances of passing the NCLEX-RN.

There were contrasting preparatory experiences for those who failed the NCLEX-RN the first time compared to the experiences of first-time NCLEX-RN passers. In this study, the participants who failed the NCLEX-RN the first time admitted to a lack of preparation, lack of focus, lack of time, and lack of prioritization during the NCLEX-RN preparation period. Interestingly, they had more self-confidence compared to those who passed the NCLEX-RN the first time. This result corroborates the findings of Eddy and Epeneter (2002) that argued USEN who failed the NCLEX-RN the first-time lacked preparation and had higher levels of self-confidence before the NCLEX-RN. Their lack of preparation was related to family responsibilities, childcare needs, presence of distractions, work demands, and deliberately not prioritizing reviewing for the exam. Those who failed the NCLEX-RN the first-time were employed in nursing before and during the time they took the NCLEX-RN, which points to the possible negative influence of full-time work hours on their NCLEX-RN outcome. Familial factors such as childcare issues and spouse's work schedule were likewise identified as contributory factors to the participants' lack of preparation. Moreover, those who failed NCLEX-RN the first time had a longer time lag between graduation from nursing school until the time they took the NCLEX-RN exam compared to those who passed the NCLEX-RN the first time. These findings corroborate earlier IEN NCLEX-RN studies on the negative influence of family and work responsibilities (Choe & Yang, 2009; Squires, 2017) and longer time lag (Davis & Nichols, 2002; Woo et al., 2009) on NCLEX-RN outcomes.

Confusion on using multiple review materials and differences in nursing practice from past and current healthcare work experiences were mentioned as part of the participants' experiences. Regarding HWE, the difference in U.S. standards of nursing practice and their actual past and current employment created conflicts when answering NCLEX-RN test questions. Nevertheless, they generally recognized the positive influence of international HWE on their ability to learn the ideal standards of nursing practice.

Furthermore, those who failed the NCLEX-RN the first time possessed a certain level of self-awareness and accountability and they blamed themselves for their failure on the exam. Self-blame was a characteristic reported among those who failed the NCLEX-RN (Eddy & Epeneter, 2002). The participants' experiences in taking the NCLEX-RN for the first time and their self-assessment led them to deliberately change their strategies when they took the test for the second time. These changes involved putting more time and effort into their review, modifying the amount and type of review materials, and seeking support from spouse and babysitters for childcare issues. The effects of these modifications in their review strategies became evident in their NCLEX-RN outcome as four of them eventually passed the second time they took the NCLEX-RN.

This relevant finding underscored the differences in the experiences of IEN who passed and those who failed the NCLEX-RN for the first time. The lack of available literature to describe and compare IEN NCLEX-RN experiences and outcomes highlighted the importance of this incidental finding. Future studies can be undertaken to

determine the comparability of this finding to other IEN NCLEX-RN experiences and outcomes.

Research Question 2: Facilitating Factors of IEN NCLEX-RN Experiences

Research question 2 was as follows: What are the facilitating factors that IEN experienced while preparing for the NCLEX-RN? In this study, various individual contextual and behavioral factors, academic factors, learning strategies, review resources, and external environmental, sociocultural, and political factors facilitated the IEN NCLEX-RN experiences. These findings support the NURS model's multidimensionality of factors that influence NCLEX-RN outcomes.

The participants' individual and cultural attributes as Filipinos were factors that positively influenced the NCLEX-RN experiences. The influence of individual characteristics on the NCLEX-RN supports Bank et al.'s (2018) findings on the influence of demographic factors on NCLEX-RN outcomes. Consistent with the collective and paternalistic nature of Eastern cultures (Rich, 2007; Ross et al., 2007), most of the participants' desire to become nurses and migrate to the U.S. was due to the influences and advice of family and relatives who were usually healthcare professionals in the U.S. The participants' desire to provide their families a better future and to achieve that much sought-after but elusive American dream became their primary motivation to work harder until they became U.S. nurses (Castro-Palaganas et al., 2017; Masselink & Lee, 2010; Ortega, 2018).

Civil status of an individual during the NCLEX-RN preparation time may influence the quality of the NCLEX-RN experience and outcome. Certain aspects of

being single and married had a favorable influence on the participants' NCLEX-RN preparation. The majority of those who passed NCLEX-RN the first-time were single and claimed that fewer family demands, stressors, and responsibilities resulted in having more time and focus for the review. This finding supports previous claims that a long time of studying is associated with higher chances of passing the NCLEX-RN (Beeman & Waterhouse, 2003). Moreover, this finding corroborates earlier research that reported family responsibilities to have a negative association with NCLEX-RN outcome (Choe & Yang, 2009; Silvestri et al., 2013; Spetz & Seago, 2005; Squires, 2017). Among those who were married at the time of NCLEX-RN, spousal support provided a positive preparatory experience, a finding that is consistent with studies that claimed that the presence of support systems increased the odds of passing the NCLEX-RN (Covell et al., 2017).

The participants attributed several positive Filipino traits such as optimism, resilience, competitiveness, religiosity, nationalism, valuing education, and resourcefulness as positive influences on their NCLEX-RN experiences. As a developing country, the majority of Filipinos belong to low-to-middle class families and life struggles have taught them to be resilient and optimistic about the future. Their goals for a brighter future fuel their motivation to work hard and achieve more. Lack of job opportunities in participants' country of origin became a strong "push" factor for international migration, making the country one of the top labor exporters in the world (Castro-Palaganas et al., 2017; Ortiga, 2014, 2018) with 10% of the country's more than 100 million population working overseas (Mangahas, 2015); hence, the name overseas

Filipino worker (OFW). For nurses, this goal is the dream of every Filipino nurse – to work and live in the U.S. This context provides the rationale for their resilience, optimism, competitiveness, nationalism, and unparalleled value towards education as a means for social mobility. These positive Filipino traits became a strong driving force for studying and passing the NCLEX-RN.

The participants believed that their ethnicity as Filipinos influenced their motivation and goal to take the NCLEX-RN exam but not on their test outcomes. This finding contrasts with the findings of previous studies of Seago and Spetz (2005) and Montegrigo (2020) that claimed Filipinos have a lower NCLEX-RN first-time pass rate (FTPR) compared to USEN and other IEN, respectively. Moreover, this contention negates most studies conducted on USEN that claim race is a predictor of NCLEX-RN passing (Alameida et al., 2011; Briscoe & Anema, 1999; Crow et al., 2004; Daley et al., 2003; Haas et al., 2004; Kaddoura et al., 2017; Lockie et al., 2013; Sayles et al., 2003). The qualitative nature of this study and self-report as a potential source of bias can be a limitation in the participants' claim that ethnicity did not influence their NCLEX-RN outcome. As such, caution must be taken in interpreting this finding regarding the influence of ethnicity on IEN NCLEX-RN outcome.

The majority of the participants considered language as contributory to a positive NCLEX-RN experience and outcome. This is due to the use of the English language as an official language and the medium of instruction in all levels of education in the Philippines, as well as the use of U.S.-authored nursing textbooks in their nursing education. Most Filipinos are bilingual, being proficient with both the English and

Filipino (Tagalog) languages and can speak an additional one or more dialects. While the use of the English language in nursing textbooks and NCLEX-RN resources was an advantage to PEN, this was a hindrance to Korean IEN (Choe & Yang, 2009). This study's finding on the influence of language on NCLEX-RN outcome is contrary to the majority of earlier IEN studies that claimed language had a negative influence on NCLEX-RN outcomes (Bahari, 2015; Choe & Yang, 2009; Davis & Nichols, 2002; Lujan & Little, 2010; Marcus et al., 2014; Schipiour, 2016; and Squires et al., 2016). Possible explanations for this conflicting finding are the Philippine's use of English as an official language, as the seventh-largest English-speaking country in the world, and high (98.2%) literacy rate of the Philippines (Central Intelligence Agency [CIA], 2020; World Population Review [WPR], 2020). Nonetheless, these reasons do not provide sufficient explanation for the high failure rate of PEN in the NCLEX-RN, which points to the possibility of other factors that account for the low NCLEX-RN FTPR of PEN.

Certain occupational factors in the participants' local and international healthcare experience (HWE) facilitated NCLEX-RN experiences. Most of the participants were in Canada, the U.S., UAE, Saudi Arabia, Oman, and Qatar at the time of data collection for this study, which reflects the culture of Filipino nurse migration. The positive influence of HWE on the NCLEX-RN experiences was dependent on the quality of HWE rather than the quantity or length of HWE. Generally, their HWE outside the Philippines provided more meaningful experiences that helped them in the NCLEX-RN. The advantage of international HWE is related to exposure to protocols and standards of nursing practice that are similar to the U.S. healthcare system, the use of advanced

technology, and exposure to a variety of complex patient cases. Philippine HWE that was helpful to the NCLEX-RN experience was related to jobs that require a certain level of nursing knowledge that is higher than that usually required of a staff nurse. This finding supports Covell et al., 2017's study on the positive influence of IEN HWE on NCLEX-RN outcomes. The lack of HWE was an advantage to some participants because it provided them more time to study, a finding that is consistent with Beehouse and Waterman (2003) study. While the available literature supports longer HWE as a predictor of NCLEX-RN success (Covell et al., 2017), the finding of this study opens the door to a unique perspective into unemployment during the NCLEX-RN preparation as a facilitating factor. This result warrants further investigation to include other IEN and compare the influence of HWE characteristics on their NCLEX-RN experiences and outcomes.

In this study, those who passed the NCLEX-RN the first time were younger compared to those who failed, which supports the findings of Haas et al. (2004). This is contrary to the studies of Briscoe and Anema (1999), Daley et al., (2003), and Vandenhouten (2008). However, Haas et al.'s (2004) conclusion should be considered with caution because their conclusion was inconclusive due to the misinterpretation of the *p*-value on their findings. The discrepancy on the research finding may be attributed to several factors, which are more cultural and contextual rather than biological or developmental. First, before 2013, the Philippine education system consisted of only ten years of basic education; six years of grade school and four years of high school (Quizmundo, 2012). College freshmen are usually 16 or 17-year-olds; they typically

graduate at 20 or 21 and take the PNLE in the same year they graduate from nursing school. As such, the earliest age one can sit for the NCLEX-RN is 22 years. Almost half of the participants took the NCLEX-RN a year after graduating from nursing school. Second, the norm in the Philippines is for a college student to be a single, full-time student, supported by their families. In general, being married, working part-time, working while a student, and not graduating within 4 years are perceived differently. Anyone who is outside those norms, for whatever reason, is usually stigmatized. Third, the Filipino value towards college education is perceived as an obligation for parents to send their children to college. This cultural norm is a motivation to complete nursing degrees within four years.

Adequate mental preparation, positive attitudes, and critical thinking had positive influences on NCLEX-RN outcomes. These characteristics and behaviors are crucial in providing structure and discipline for effective individual study habits. The unique context of nursing in the Filipino culture may explain the source of motivation to pass the NCLEX-RN. Nursing is one of the most expensive college majors in the Philippines (Ortiga, 2018). Families invest in nursing education as a means to achieve the American dream and with the Filipinos' value for education, achievement of graduation, and desire to achieve better opportunities are strong motivations to pass the NCLEX-RN. Similarly, the enthusiasm for more job opportunities was the biggest motivation for Korean IEN during their NCLEX-RN preparation (Choe & Yang, 2009). Also, the expensive cost of NCLEX-RN application processing is seen as an investment by families and relatives; hence, the need to pass the NCLEX-RN successfully the first-time. These motivations

help in providing structure and focus on the review process. This finding is relevant because it supports Hackney's (2017) findings that those with higher motivation levels had greater chances of passing the NCLEX-RN. Interestingly, while the result of this study revealed self-confidence had a positive impact on preparation and testing, some participants who failed the NCLEX-RN the first time had a higher level of self-confidence before the test compared to those who passed the exam. This finding supports the previous finding that those who failed the NCLEX-RN were more confident than those who passed the exam (Eddy & Epeneter, 2002). Additionally, there was a larger percentage of USEN than IEN who were not confident in their ability to pass the NCLEX-RN (Woo et al., 2009). The result of this study contrasts with earlier studies which showed that lack of confidence may adversely affect NCLEX-RN outcome (Choe & Yang, 2009; Eddy & Epeneter, 2002; Kasprovich & VandeVusse, 2008).

The participants valued critical thinking as a cognitive skill that is needed to pass the NCLEX-RN. Critical thinking is needed to develop clinical judgment, which is a nursing attribute that is essential in analyzing clinical scenarios in the exam (NLN, 2010). NCLEX-RN questions were designed to require higher-order thinking skills such as application and analysis (NCLEX-RN, 2019); hence, critical thinking is an essential cognitive characteristic that is needed to successfully pass the NCLEX-RN. This finding supports the results of various studies that were conducted among USEN that demonstrated that critical thinking is a significant predictor of NCLEX-RN success (Banks et al., 2018; Giddens & Gloeckner, 2005; Hoffman, 2009; Romeo, 2013; Sears et al., 2015). While the participants in this study emphasized the positive influence of

critical thinking on their NCLEX-RN preparation, other studies reported opposite IEN experiences (Bahari, 2015; Peisachovich, 2015; Xu, 2010). These differences show some strengths of Philippine nursing education and aspects of HWE in the Philippines concerning nurses' roles in critical thinking development, in comparison with the practices of IEN from other countries. Currently, the literature provides no quantitative evidence critical thinking as predictive of IEN outcomes. This qualitative finding can add to the limited literature about critical thinking on IEN. It suggests the importance of identifying critical thinking abilities of IEN and implementing strategies to improve this cognitive skill because the need for critical thinking will be more relevant with the advent of the Next Generation NCLEX (NGN) in the next few years (Caputi, 2019; Eastridge, 2019; NCSBN, 2019).

The use of adequate and effective review resources and strategies, efficient use of resources such as time, support system, finances, and the environment, and the ability to avoid distractions were facilitating factors of a positive NCLEX-RN experience. The participants used various U.S.-authored resources, which are the same resources recommended to USEN when preparing for the NCLEX-RN (Czekanski, Mingo, & Piper, 2018). Despite the abundance of NCLEX-RN review resources, it is unclear which of these had a significant impact on NCLEX-RN success (Hyland, 2012).

Individual differences in learning needs and learning styles accounted for variations on the participants' selection of review strategies. The two most common review strategies that the participants used were content review and answering NCLEX-RN practice test questions. This finding supports the claim that answering practice

questions, including the number of questions and quizzes taken, help improve NCLEX-RN results (Cox-Davenport & Phelan, 2015; Lutter, Thompson, & Condon, 2017). Test-taking strategies are crucial because test-taking strategies influence NCLEX-RN outcomes (Griffiths et al., 2004; Mc Farquhar, 2014; Sayles et al., 2003; Sears et al., 2015). This finding is also consistent with previous studies on the role of learning styles and NCLEX-RN outcomes. The choice of learning strategies based on a thorough assessment of one's own learning needs is crucial to effective learning (Davis et al., 2015), thus influencing the NCLEX-RN outcome (Lockie et al., 2013).

Enrollment in a review center was a facilitating factor to the participants' NCLEX-RN experience. It is a popular review strategy in the Philippines due to the abundance of review centers nationwide that was brought about by the nursing boom in the Philippines in the mid-2000s. The commercialization of nursing schools in the country created business affiliations between these review centers and almost 90% of the nursing schools (Brush, 2008; Masselink & Lee, 2010; Ortiga, 2014). Enrollment in a review center is an approach that Korean IEN used when preparing for the NCLEX-RN that resulted in high NCLEX-RN pass rates (Choe & Yang, 2009). Although university-based review centers in the Philippines exist, they are less common compared to commercial review centers

The availability of time was a critical factor that fostered a positive NCLEX-RN experience and outcome among the participants, a finding that supports the claim of Beeman and Waterhouse (2003). Moreover, following a structured schedule was helpful to most participants, a practice associated with higher chances of NCLEX-RN passing

(Davenport, 2007; Seldomridge & DiBartolo, 2004). Time lag, the interval between graduation from nursing and taking the NCLEX-RN, is another aspect of time that was found to be significant in this study. This study found that a shorter time lag showed favorable NCLEX-RN outcome, supporting Davis and Nichol's (2002) and Woo et al.'s (2009) claims that shorter time lag increased the chances of passing the NCLEX-RN.

The availability of a support system, adequate finances, a conducive learning environment, and a healthy lifestyle contributed to positive NCLEX-RN experiences. Support systems such as family, relatives, peers, colleagues, and online support were available to the participants throughout the NCLEX-RN preparatory period. These findings support earlier studies on the role of support systems in influencing NCLEX-RN outcomes (Anders et al., 2007; Choe & Yang, 2009; Covell et al., 2017; Kasprovich & VandeVusse, 2018).

The participants reported the need for a conducive, comfortable, and distraction-free environment as well as the availability and accessibility of a study space (i.e. review center) to foster a positive NCLEX-RN experience. Thus, the learning environment is an essential resource to consider for promoting effective learning. Studies have shown that a learner's physical environment can affect as much as 25 percent of their learning and when learners are involved in creating their own learning space, this helps promote positive learning outcomes (Cooper, 2018).

Certain educational factors were regarded as NCLEX-RN facilitating factors. Generally, the participants regarded their nursing education in the Philippines as helpful in preparing them for the NCLEX-RN. The strength and positive influence of the

Philippine nursing curriculum on the NCLEX-RN experiences of the participants can be attributed to historical, educational, and cultural factors. The competition among nursing schools during the PNLE, where schools are ranked nationally based on their graduates' performance, warranted the inclusion of review classes for two semesters during the fourth year of the nursing program. Considering the comprehensiveness of topics covered in the 500-question PNLE, this unique component of the Philippine nursing curriculum was generally reportedly as beneficial to the participants when they prepared for the NCLEX-RN. This finding is similar to some nursing programs in the U.S. as an attempt to improve NCLEX-RN FTPR (Cox-Davenport & Phelan, 2015; Crow et al., 2004; Phelan, n.d.). Nevertheless, the NCLEX-RN performance of its nursing graduates did not reflect the strength of the standard Philippine nursing curriculum because more than half the first-time NCLEX-RN examinees fail the exam (Montegrigo, 2020; NCSBN, 2019). This leads to the assumption that there may be other factors that influence the NCLEX-RN outcomes of PEN that warrant further investigation. Concerns about the deterioration of the quality of nursing education in the country based on decreasing pass rates on the PNLE (Bautista et al., 2018; Montegrigo, 2019; Ordonez & Ordonez, 2009; Rosales et al., 2014) may have impacted the NCLEX-RN outcomes of PEN. To date, no published studies have determined the association of academic performance of PEN and NCLEX-RN outcomes. This can be an impetus for further research on this area.

Academic performance was a facilitating factor on the participants' NCLEX-RN experience and performance. This finding supports the majority of literature that investigated the influence (Alameida et al., 2011; Daley et al., 2003; Giddens &

Gloeckner, 2005; Haas et al., 2003; Kaddoura et al., 2017; Kidder, 2015; Quinn et al., 2018; Romeo, 2013; Sears et al., 2015; Tipton et al., 2008) and predictive ability of academic performance on USEN NCLEX-RN outcomes (Banks et al., 2018; Bosch et al., 2012; Brodersen & Mills, 2014; Campbell & Dickson, 1996; Grossbach & Kuncel, 2011; Kaddoura et al., 2017; Landry et al., 2010; Romeo, 2013; Silvestri et al., 2013; Simon et al., 2013; Uyehara et al., 2007). This finding was based on the participants' self-report of their academic performance, compared to the GPA that was used in the above studies. There is a lack of published studies about the association between academic performance and NCLEX-RN outcomes on IEN. Thus, the qualitative evidence in this study provides initial data on this possible association. Although academic performance is currently regarded as the strongest predictor of NCLEX-RN performance on USEN, the lack of published research on this area on IEN is a major impetus for future studies.

More participants reported that a master's degree in nursing is a facilitating factor when taking the NCLEX-RN. Learning advanced nursing concepts and exposure to best practices in nursing and evidence-based nursing practice in graduate school may have enhanced the foundational nursing knowledge and further developed reading, comprehension, and critical thinking skills, skills that are essential on the NCLEX-RN. Possession of a graduate nursing degree is a contextual difference for IEN because the decision to take the NCLEX-RN is optional and may occur later in their career. Thus, they may have completed advanced nursing degrees before applying for the NCLEX-RN.

Studies that investigated the influence of other bachelor's and master's degrees on NCLEX-RN outcomes focused primarily on USEN. These degrees, however, were non-

nursing degrees. These were students who studied nursing as a second career. In one study, Alameida et al. (2011) reported that no significant differences were found on NCLEX-RN passing between regular BSN and master's entry students. On the few available IEN studies that explored other degrees, 90 percent of IEN have bachelor's degree or higher, and compared to the U.S., Canada, U.K., and India, the Philippines has the highest percentage of RNs with a bachelor's degree or higher (Spetz et al., 2014). Covell et al. (2017) reported that more than half of IEN in Canada had a bachelor's or higher degree. However, these data did not specify the proportion of graduate degrees; did not determine whether they were acquired before taking the NCLEX-RN or not; and did not show association with NCLEX-RN outcomes. This finding is contrary to studies on IEN with graduate degrees and their NCLEX-RN performance (Genovese et al., 2015; Palmer et al., 2019). Aside from this study, there are no published studies found that support the positive association of advanced graduate degrees and NCLEX-RN outcomes in IEN.

Some participants reported that mastery in medical-surgical nursing and management of care facilitated their NCLEX-RN experiences. This can be partly explained by the nursing curriculum, clinical experiences as nursing students, and graduate studies. The standard Philippine nursing curriculum, is taught in four different semesters, with eight didactic hours per week. The majority of the students' 2,703 clinical hours are mainly in medical-surgical nursing areas (CHED, 2017). Clinical experiences are eight credit-hour courses or 24 clinical clock hours per week, except for the last semester which is a more intensive clinical practicum of 32 hours per week.

Comparatively, the length of lecture hours and clinical hours in medical-surgical nursing in the Philippine nursing curriculum is longer than the didactic and practicum clock hours on the U.S. nursing curriculum. Although medical-surgical nursing topics are generally considered as the most challenging topics in the NCLEX-RN (Davis & Nichols, 2002; Mathew et al., 2015; Squires, 2017; Squires et al., 2016), the participants' HWE as staff nurses and faculty members and possession of a graduate nursing degree provided another layer of knowledge and skills in medical-surgical nursing that helped them on the NCLEX-RN exam. This information provides another insight into the different contextual situations of IEN where HWE is a variable to consider when taking the NCLEX-RN. The findings in this study on the influences of academic factors such as the nursing curriculum, academic performance, and advanced nursing degrees on IEN NCLEX-RN outcomes unlocked a potential new area of research.

The participants' experiences with the PNLE and other international nursing licensure exams were facilitating factors of NCLEX-RN experience. The comprehensiveness of the PNLE was a major reason for its positive impact of their NCLEX-RN experience. The PNLE covers 12 subject areas that are divided into five parts with each part consisting of 100 questions. These subject areas include the major subject areas (medical-surgical nursing, pediatric nursing, maternal and child nursing, psychiatric nursing, fundamentals of nursing, and community health nursing including communicable disease nursing), non-clinical nursing courses (nursing research, and leadership and management), and integration of foundational courses (anatomy and physiology, pathophysiology, pharmacology and therapeutics, nutrition and diet therapy,

and microbiology and parasitology) (BON, 2019). Moreover, systemic and institutional factors account for the positive effect of the PNLE on the participants' NCLEX-RN preparation. The CHED uses the PNLE as a tool to monitor the quality of nursing schools (CHED, 2017). PNLE results are published in national newspapers and online, including the top 10 performing individuals and institutions and the complete list of nursing schools' performance. This puts pressure on nursing schools to achieve satisfactory pass rates on the PNLE. One major systemic intervention in place is the inclusion in the nursing curriculum two semesters of review classes in the senior year to prepare the students for the PNLE (CHED, 2008). After graduation, schools further offer an average of three to five months of comprehensive and review classes to ensure successful PNLE outcomes among their graduates. This is a common practice in as much as 90% of nursing schools that have an association with commercial review centers (Masselink & Lee, 2010).

Furthermore, participants who had international HWE before taking the NCLEX-RN and passed other national nursing licensure examinations provided another means of determining their nursing competency and opportunities to take a computer-based examination, which contributed to their NCLEX-RN experiences. At present, there are no published studies on the association of national nursing licensure examination and NCLEX-RN outcomes on IEN. The results of this study provide preliminary information on the positive influences and possible association between the NCLEX-RN and international nursing licensure examinations.

Few participants described the NCLEX-RN application process as a facilitating factor of NCLEX-RN experience. This positive perspective was related to the assistance provided by review centers or employment agencies. This finding is contrary to one IEN study that claimed most IEN regarded the licensure application process as a barrier (McGillis Hall et al., 2015). This was mainly related to the long time-consuming application process that may take several months to a year, the difficulty of the English proficiency exams, and the cost of eligibility requirements for the licensure exam.

Economic, sociocultural, and political factors such as immigration policies facilitated the NCLEX-RN experiences of some participants. Economic factors played a very significant indirect role in the overall NCLEX-RN experiences of the participants. The participants' socioeconomic status served as a motivation for their NCLEX-RN preparation. The Philippines is a developing country with 21.6 percent of its 109 million population living below the poverty level (CIA, 2020). International migrant labor is a cultural norm in the Philippines that accounted for 10 percent of its population working and living overseas (Mangahas, 2015). Filipinos perceive international nurse migration as one of the best means for upward social mobility (Castro-Palaganas et al., 2017; Masselink & Lee, 2010; Ortiga, 2018). The economic benefits of working and living as a nurse in the U.S. remain the top reason for choosing the U.S. as the top destination among PEN (Castro-Palaganas et al., 2017; Marcus et al., 2014; Ortiga, 2018).

Sociocultural factors played a role in the IEN NCLEX-RN experience. The social recognition from colleagues for passing the NCLEX-RN was a motivation that facilitated some of the participants' NCLEX-RN experience, which supports Choe and Yang's

(2009) study. The NCLEX-RN passers became sources of reference on evidence-based information to their colleagues. Moreover, negative sociocultural experiences fueled some of the participants' desire to migrate from the Middle East to the U.S. These negative experiences reflected the prevailing racism in the Arab world (Nashed, 2017), which shed light on discrimination of IEN regardless of their origin and workplace (Walani, 2015). The perception the NCLEX-RN passer participants of being at a different caliber as well as the negative experiences of workplace discrimination in the Middle East served as motivators to take the NCLEX-RN are considered unexpected findings in this study.

The U.S. nursing shortage and the recent changes in U.S. immigration policies on IEN recruitment had positive effects on the participants' NCLEX-RN experiences. The availability of U.S. working visas or employment-based immigrant visas for IEN is a crucial driving force that influenced trends in nursing school enrollment in the Philippines (Arends-Kuenning et al., 2015; Choy, 2003; Masselink & Lee, 2010; Ortega 2014). The enactment of the Emergency Nursing Relief Act of 2017, which allowed for a more expedited visa processing last 2019 (U.S. Bureau of Consular Affairs, 2019). This development slowly lifted the visa retrogression for nurses that started during the U.S. economic recession in 2008, a move that reignited some participants' long overdue dream of working in the U.S. and became a strong motivation to pass the NCLEX-RN recently. A promising development on U.S. immigration policy that will impact IEN migration to the U.S. and may potentially influence decisions to take the NCLEX-RN is the anticipated passage of the Healthcare Workforce Resilience Act of 2020 (S. 3599). This

bill was created to allow 25,000 IEN to join the U.S. frontline during the COVID-19 pandemic (CGFNS, 2020).

These facilitating factors of IEN NCLEX-RN experiences support similar studies that were conducted on USEN, which illustrate the multidimensionality of individual, academic, social, and environmental factors that influence the NCLEX-RN testing experience and outcomes (Brodersen & Mills, 2014; Carrick, 2011; Carthon et al., 2015; Dewitty et al., 2016; Gates, 2018; Jeffreys, 2015; Metcalfe & Newbrander, 2016; Mooring 2016; Relf; 2016; Scott & Zerwic, 2015; Zeran, 2016).

Research Question 3: Hindering Factors of IEN NCLEX-RN Experiences

The third research question was: What are the hindering factors that IEN experienced while preparing for the NCLEX-RN? The researcher found that several individual, contextual, academic, and environmental factors were described as hindrances to a positive NCLEX-RN experience. This section discusses the hindering factors of IEN NCLEX-RN experiences in the light of the existing literature and implications to the population of IEN.

Individual and cultural factors such as procrastination, family-centeredness, language, age, and HWE were individual, cultural, and contextual characteristics that were identified as hindering factors during the participants' NCLEX-RN preparation. Procrastination is relatively common but it has a significant historical and cultural meaning to Filipinos. Also called *mañana habit*, procrastination is a commonly known Filipino trait that is historically rooted in the systemic disempowerment of the Filipinos during the three centuries of Spanish colonialism in the Philippines (Miranda, 2003). This

is a trait that the participants shared as a common behavior while waiting for the approval of their NCLEX-RN eligibility or authorization to test (ATT). This can negatively impact test outcomes because procrastination may result in increased stress, decreased performance, poor time management, or the inability to handle tasks (Dela Cruz, 2013).

Family centeredness exerted a negative influence on the participants' NCLEX-RN preparation due to the performance of familial responsibilities such as household chores, childcare, or tending to parental or spousal needs. This family-related experience supports previous U.S. and IEN studies about the negative impact of family demands on passing the NCLEX-RN (Choe & Yang, 2009; Silvestri et al., 2013; Spetz & Seago, 2005; Squires, 2017).

Fewer participants mentioned that English language was a hindrance to their NCLEX-RN experience, which supports the argument that language may be a construct-irrelevant variance (Bosher & Bowles, 2008; Johnston, 2011). This finding supports the majority of literature on the influence of language on IEN NCLEX-RN outcomes. Non-native English speakers were found to have a negative association with NCLEX-RN passing in both IEN (Bahari, 2015; Canadian Association of Schools of Nursing, 2015; Choe & Yang, 2009; Davis & Nichols, 2002; Lujan & Little, 2010; Logue & Gordon, 2018; Marcus et al., 2014; McGillis Hall et al., 2016; Parrone et al., 2008; Petrovic et al., 2019; Schipiour, 2016; Squires, 2017; Squires et al., 2016) and USEN studies (Breckenridge et al., 2012; Chen & Bennett, 2016; Dudas 2011; Eddy & Epeneter, 2002; Hansen & Beaver, 2012; Kaddoura et al., 2017; Olson, 2012; O'Neill et al., 2006; Seago & Spetz, 2012; Sears et al., 2015; Silvestri et al., 2013; Williams et al., 2018).

Few participants reported age as a deterrent in their NCLEX-RN preparation. The Philippines has a young population with a mean age of 23.5 years (World Population Review, 2020). Typically, Filipinos graduate in college at the age of 20 years. At this young age, peers play a major role in their lives, which was claimed as a source of distraction by two participants. On the other hand, being in the late 30s and early 40s were considered as *old* by two other participants, referring to their concentration, memorization, and attention span to study. This finding corroborates a study on Korean IEN when older nurses reported difficulty with memorizing materials while preparing for the NCLEX-RN (Choe & Yang, 2009). In this study, most of the participants who passed the NCLEX-RN the first time were younger compared to those who failed the NCLEX-RN the first time, a finding that supports Haas et al.'s (2004) study but refutes other studies (Briscoe & Anema, 1999; Daley et al., 2003; Vandenhouten, 2008). Most of those who passed took the NCLEX-RN a year after graduating from nursing, which points to the possible influence of a shorter time lag as a factor in passing the NCLEX-RN. Time lag was found to be predictive of NCLEX-RN passing – a shorter time lag increases the chances of passing the NCLEX-RN (Davis & Nichols, 2002; Woo et al., 2009).

Most participants considered full-time HWE as a hindering factor in their NCLEX-RN experiences. This is primarily related to the lack of time for studying due to work schedules. This finding supports various studies that claimed that lack of time negatively influences NCLEX-RN preparation (Choe & Yang, 2009; Eddy & Epeneter, 2002, Mc Farquhar, 2014). NCLEX-RN studies on USEN reported that working more than 16 hours per week adversely affects academic performance (Mthimunya & Daniels,

2019; Salamonson et al., 2014). Although their study did not measure HWE on NCLEX-RN outcome, it provides insight into the possible negative influence of HWE on the learning process. This is an interesting finding for IEN because their HWE would have contributed to the enhancement of basic nursing knowledge and skills that were acquired from nursing school. Additionally, the participants reported differences in nursing practice as a hindrance to their NCLEX-RN experiences, a finding that is consistent with two other studies (Petrovic et al., 2019; Squires et al., 2016). However, this finding contradicts Mazurenko et al.'s study (2014) that concluded there is no difference in work experiences between the USEN and IEN due to the longer and more diverse HWE as well as advanced degrees among IEN. While this research provided qualitative evidence of primary data, Mazurenko et al.'s (2014) study involved secondary data analysis of IEN HWE, which can account for the differences in context and data interpretation.

HWE as staff nurses in the Philippines did not contribute to the participants' NCLEX-RN experience owing to the lack of resources and lack of practice standards in most healthcare facilities in the country. The lack of use and exposure to healthcare technology is one area of deficiency that was found in IEN (Lurie, 2016). This finding affirms a Philippine government report about the country's health infrastructure:

There is no disputing the fact that most of our government health facilities, are in a state of disrepair, inadequately equipped, scantily supplied and poorly manned. Years and years of neglect of the government's health infrastructure have resulted in this (Cabral, 2016, p. 3).

The negative influence of HWE on IEN NCLEX-RN experiences is a finding that needs further investigation. Due to the difference in contextual situations on IEN, more studies

are needed to validate the findings on the lack of time due to full-time work, in general, and the quality of HWE among IEN, in particular, as hindrances on IEN NCLEX-RN preparatory experiences.

The presence of certain psychosocial factors such as anxiety, distractions, pressure, and stress, and negative behaviors like lack of focus and lack of acceptance of the validity of the test negatively impacted the participants' NCLEX-RN preparatory experiences. The presence of anxiety directly impacted the actual testing experience of most participants. Previous studies reported similar findings of the negative impact of anxiety on testing outcomes of IEN (Bahari, 2015; Kasprovich & VandeVusse, 2018; Li et al., 2015; Mc Farquhar, 2014; Woo et al., 2009) and international students in general (Alizadeh et al., 2014; Roykenes et al., 2014). However, the result of this study is contrary to Tipton et al.'s (2008) study that concluded stress is not associated with NCLEX-RN outcomes. Possible reasons for this difference in findings are the study population of associate degree nursing (ADN) students and the violation in the assumption of using Chi-square for data analysis.

Distractions such as peer pressure, work, and family demands were also reported as hindrances. These distractions reduced the participants' time and ability to focus on their review preparation. This result affirms previous studies that claimed a lack of focus as detrimental to NCLEX-RN preparation (Eddy & Epeneter, 2002; Mc Farquhar, 2014). The presence of stress related to the NCLEX-RN application process, finances, work, and family demands negatively affected the participants' NCLEX-RN experiences. The numerous documents, processing and mailing costs, and long processing time involved in

the NCLEX-RN application caused stress among the participants. This finding supports multiple studies that reported that the NCLEX-RN licensure application process was a significant barrier on IEN's experiences (Eder, 2016; Mc Gillis Hall et al., 2015; Moyce et al., 2016; Schipiour, 2016). This negative association of stress and NCLEX-RN experiences affirms previous studies (Choe & Yang, 2009; Eddy & Epeneter, 2002; Kasprovich & VandeVusse, 2018; Sayles et al., 2003; Sears et al. 2015). Although this study did not determine the impact of stress on test outcome, the presence of stress in itself was evaluated by participants as sufficient enough to cause a negative NCLEX-RN experience. Lack of focus and issues related to preparation were regarded as hindrances to the participants' NCLEX-RN experiences. USEN previously identified lack of preparation as a cause of NCLEX-RN failure (Choe & Yang, 2009; Eddy & Epeneter, 2002; Squires, 2017; Woo et al., 2009). Recognizing and reducing these negative psychosocial factors may help in improving NCLEX-RN outcomes (Choe & Yang, 2009; Sears et al., 2015).

Gaps in an overloaded the standard Philippine nursing curriculum and various nursing courses negatively contributed to the participant's NCLEX-RN experiences. Concepts related to delegation and prioritization were the most commonly identified gaps that significantly impacted their NCLEX-RN experience. Part of the difficulty is the difference in Philippine and U.S. nursing practice on modalities of nursing care, types, and levels of nursing personnel (registered nurse [RN], licensed practical nurse [LPN], and UAP [unlicensed assistive personnel]), and triage. LPN do not exist in Philippine nursing practice. UAP, also called nursing assistants or attendants, are common in the

Philippines but their training, certification, and scope of practice are different from the U.S. The content in the NCLEX-RN related to delegation to such personnel is absent in the Philippine nursing curriculum due to differences in nursing practice. Earlier studies identified these differences as deficiencies in IEN nursing education (ICN, 2012; Lu & Kitt-Lewis, 2018; McGillis Hall et al., 2016; Squires et al., 2016; Xu, 2010) and further supports similar IEN studies that described NCLEX-RN prioritization and delegation questions as challenging (Mathew et al., 2015; Quinn et al., 2018; Schipiour, 2016; Squires et al., 2016; Squires, 2017).

Cultural awareness and social determinants of health were also identified as curriculum gaps that may potentially impact the way IEN answers an NCLEX-RN question. A community-oriented nursing curriculum, differences in cultural diversity focus, and lack of emphasis of these concepts in nursing education may have contributed to a lack of understanding of these concepts. Cultural diversity is relevant to IEN because it is reflected on the NCLEX-RN test plan as *Culture and Spirituality*, which is one component of the NCLEX-RN's five Integrated Processes that was incorporated on the test plan in 2016 (NCSBN, 2019).

The participants' clinical experience as nursing students was repeatedly described as not ideal for learning the established standards of nursing practice, which affected NCLEX-RN preparation. The clinical environments used for these experiences usually lack resources, both in staffing and equipment, that are needed to foster clinical learning. Most clinical environments used for student clinical teaching are government hospitals that are struggling with infrastructure, equipment, and staffing resources (Cabral, 2016).

During the peak of nursing enrollment in the Philippines and based on the researcher's personal experience as a nurse educator and administrator in the Philippines, lack of clinical space was a problem, where clinical groups were assigned in three shifts and two to three nursing students had to share one patient simultaneously within a shift.

Problems related to nursing students' clinical experiences are not unique to Philippine nursing education as these often exist in other countries (Hou et al., 2019; Makata et al., 2016; Nair & Rajan, 2017; Squires, 2017). Eddy and Epeneter (2002) reported similar issues in USEN clinical experiences that adversely impacted nursing graduates when they took the NCLEX-RN. The lack of clinical space and hospital resources created various structural, pedagogical, and relational gaps in clinical teaching and learning that led to a theory-practice gap in Philippine nursing education (Factor et al., 2017). Clinical experiences of nursing students provide opportunities for students to apply theory learned in didactic classes into actual clinical situations, which is a critical component of nursing education (Oermann, 2015).

Additionally, some participants identified the overloaded nursing curriculum as a problem in Philippine nursing education. This finding supports studies on global nursing curricula that reported concerns about an overloaded curriculum (Choe & Yang, 2009; Muraraneza et al., 2017). Ortega (2014) claimed that nursing is one of the heaviest college programs in the Philippines, with more courses than a prominent U.S. undergraduate nursing program. An overloaded curriculum leads to content saturation that may hinder long-term retention of content and development of critical thinking and

clinical judgment that impact NCLEX-RN results (Getha-Eby, Beery, O'Brien, & Xu, 2015).

Some participants mentioned that the quality of nursing education may have an impact on the NCLEX-RN performance of PEN. This concern about the quality of nursing education in the Philippines was reported in several studies (Aiken, 2007; Bautista et al., 2018; Dator, 2016; Marcus et al., 2014; Masselink & Lee, 2010; McGillis Hall, 2014; Montegrigo, 2019; Ortiga, 2014, 2018; Rosales et al., 2014). Similarly, lack of qualified nursing faculty was reported in other studies that may have accounted for low NCLEX-RN pass rates internationally (Muraraneza et al., 2017; Nair & Rajan, 2017; Squires, 2017). These findings on the influence of Philippine nursing education on the NCLEX-RN experiences of PEN illuminates the crucial role of international nursing education on IEN NCLEX-RN outcomes. This result provides insight into the dearth of literature in this area. With the lack of global standards in nursing education, the NCLEX-RN serves as a reflection of the comparability of nursing education internationally (Aiken, 2007). Exploring the role of international nursing education is crucial when understanding the reasons for the low NCLEX-RN FTPR among IEN.

Pharmacology, medical-surgical nursing, and foundational nursing concepts were the most commonly identified areas of weaknesses in the NCLEX-RN.. Difficulty in pharmacology was reported in similar IEN studies (Davis & Nichols, 2002; ICN, 2012; Lu & Kitt-Lewis, 2018; Lurie, 2016; Mathew et al., 2015; McGillis Hall et al., 2016; Sherwood & Shaffer, 2014; Squires, 2017; Squires et al., 2016). Identifying pharmacology as an area of weakness is significant for two reasons: 1) final course

grades in pharmacology was found to be a predictor of NCLEX-RN outcome among USEN (Alameida et al., 2011; Emory, 2013); and 2) pharmacological and parenteral therapies constitute approximately 12 to 18 percent of the total NCLEX-RN test questions (NCSBN, 2019). Currently, there are no published studies on the predictive ability of any nursing courses on IEN NCLEX-RN outcomes.

More participants identified medical-surgical nursing as a weakness that may influence the NCLEX-RN outcome. It is significant to point out medical-surgical nursing as an area of weakness because of two critical reasons: 1) it covers most of the NCLEX-RN categories of client needs such as Physiological Integrity and Safe and Effective Care Environment, which covers 40 to 52 percent and 26 to 38 percent of the NCLEX-RN test questions, respectively (NCSBN, 2019); 2) it is the most common nursing course predictor of NCLEX-RN success on USEN (Banks et al., 2018; Herrera & Blair, 2015; McCarthy et al., 2014; Schooley & Khun, 2014; Sears et al., 2015; Seldomridge & DiBartolo, 2004; Simon & Augustus, 2004); 3) it is related to pathophysiology and laboratory test interpretation, which are regarded as major differences in IEN nursing education (Squires et al., 2016); and 4) it is critical in analyzing difficult nursing concepts and passing the NCLEX-RN (Herrera & Blair, 2015). The relevance of medical-surgical nursing in licensure examinations was also reported in the studies of Xiao et al. (2014) and De Leon (2016) about national licensure examinations in China and the Philippines, respectively. Medical-surgical nursing was considered a predictor in the Chinese nursing licensure examination (Xiao et al., 2014) and the most difficult part of the PNLE (De Leon, 2016).

Fundamentals of nursing is critical as a foundational course for developing knowledge and competencies in other nursing courses. This foundational course was also found to predict NCLEX-RN success (Alameida et al., 2011; Penprase & Harris, 2013; Sears et al., 2015). It is crucial to identify nursing courses that are considered areas of weaknesses because competencies and course grades in these courses are predictive of NCLEX-RN success (Banks et al., 2018; Englert, 2009). By monitoring the academic performance of nursing students in these various nursing courses, nurse educators can identify at-risk students and implement remediation measures to improve student learning and licensure outcomes (Oermann & Gaberson, 2017). It is essential that these at-risk students are mentored because structured faculty-student mentoring has shown to improve student retention and NCLEX-RN pass rates (Edwards et al., 2009; Lauer & Yoho, 2013; Williams et al., 2013; Wilson et al., 2010)

Interestingly, the participants did not identify psychiatric nursing as an area of weakness. This is a unique and positive finding in this study because psychiatric nursing was reportedly the most common deficiency, both in didactic and clinical, in the IEN nursing curricula (Shaffer & To Dutka, 2012; Squires, 2017; Xu, 2010). Additionally, psychiatric nursing is one of the two most common nursing course predictors of NCLEX-RN success on USEN (Banks et al., 2018). Furthermore, the NCLEX-RN categories of client needs that were reported as "near passing" or "below passing" on the candidates' performance reports (i.e. Pharmacological and Parenteral Therapies, Risk Reduction Potential, Basic Care & Comfort, Safety & Infection Control, and Health Promotion & Maintenance) are reflective of individual knowledge, programmatic, or curriculum gaps.

Some of the alternate types of NCLEX-RN questions, such as multiple responses (commonly called select all that apply [SATA] questions) and sequencing questions, were described as *very challenging*. These types of questions are difficult because of several reasons: 1) they require more complex cognitive processes such as application and analysis to answer the question (NCSBN, 2019); 2) there is more than one correct response; 3) the examinee does not know how many correct responses are in a given SATA question, which may be one, more than one, or all (NCSBN, 2018); or sequences must be identified to get credit for that question; and 4) the examinee's level of familiarity with the alternate question format. This finding adds to the results of previous studies that reported that IEN found SATA questions challenging (Mathew et al., 2015; Quinn et al., 2018; Schipiour, 2016; Squires et al., 2016).

Testing in Philippine nursing schools is administered as a paper-and-pencil test. Most nursing test questions are in multiple-choice format, with occasional short answers, fill in the blanks, or matching type, which require lower cognitive skills such as knowledge and comprehension. SATA or sequencing, as well as hot spots, audios, chart review, were not previously parts of the nursing classroom tests. Moreover, the PNLE questions are exclusively constructed as multiple-choice questions. Differences in testing format and mode of testing in nursing schools and licensure examinations internationally resulted in unfamiliarity with the NCLEX-RN format and mode of test administration that may have impacted NCLEX-RN experiences (Bahari, 2015; Hou et al., 2019; Xiao et al., 2014).

These results shed light on the various academic factors that are negatively affecting IEN NCLEX-RN experiences and outcomes. Individual IEN and nursing schools can use these findings to determine their applicability to their contextual situations. Individual or institutional interventions can be designed to address these gaps in the nursing curriculum as an attempt to help graduates improve their chances of passing the NCLEX-RN. The lack of research on the association of academic factors on IEN NCLEX-RN outcomes and the qualitative evidence from this study may serve as a benchmark to develop future research in this area to better understand NCLEX-RN outcomes from IEN perspectives.

Ineffective review strategies, inadequate resources, and the presence of competing responsibilities were hindrances on the participants' NCLEX-RN preparatory experiences. Few participants reported ineffective review strategies related to language difficulties and arguing with the answers to practice test questions as factors that contributed to ineffective learning for the NCLEX-RN. This finding aligns with most of the results of previous studies about language significantly affecting and predicting NCLEX-RN on IEN (Bahari, 2015; Cheo & Yang, 2009; Davis & Nichols, 2002; Lujan & Little, 2010; Marcus et al., 2014; McGillis Hall et al., 2016; Petrovic et al., 2019; Schipiour, 2016; Squires et al., 2016; Squires, 2017). Generally, language was reportedly a significant issue for IEN (Moyce et al., 2016; Primeau et al., 2014). Even for USEN who are non-native English speakers, language was a predictor of passing the NCLEX-RN (Chen & Bennett, 2016; Kaddoura et al., 2017; Sears et al., 2015; Williams et al., 2018) and failing (Breckenridge et al., 2012; Dudas, 2011; Eddy & Epeneter, 2002;

Hansen & Beaver, 2012; Kaddoura et al., 2017; Olson, 2012; O'Neill et al., 2006; Seago & Spetz, 2012; Silvestri et al., 2013). Moreover, language issues may constitute problems in test-taking abilities. IEN studies showed that test-taking abilities may affect NCLEX-RN outcomes (Bahari, 2015; Griffiths et al., 2004; Li et al., 2015; Mc Farquhar, 2014; McGillis Hall., 2016; Sayles et al., 2003; Sears et al., 2015).

The participants reported that unfamiliarity with the NCLEX-RN test plan, computerized adaptive mode of testing, and the U.S. healthcare system likewise added to the participants' negative approaches to studying for the NCLEX-RN. This finding supports similar IEN studies that reported unfamiliarity with the NCLEX-RN test plan (Aiken, 2007; Bahari, 2015; Benton; 2017; Mathew et al., 2015; McGillis Hall et al., 2016; Petrovic et al., 2019; Salfi & Carbol, 2017; Xiao et al., 2014) and unfamiliarity with the U.S. healthcare system as a cause of difficulty in adapting to the NCLEX-RN (Viken, 2019). Since the NCLEX-RN was designed to reflect current nursing practice in the U.S., any examinee must be familiar with the test plan and the healthcare context to which the test was designed.

The quality of review centers was mentioned as a factor that can negatively impact NCLEX-RN preparation. The so-called nursing boom in the Philippines in the mid-2000s led to the proliferation of review centers that primarily operated as a business entity, which raised concerns about the quality of the review programs. This practice was described as the commercialization of the nursing education in the Philippines (Masselink & Lee, 2010). Despite these linkages, there was a concern about the quality of the review

programs as reflected on the low PNLE results (Bautista et al., 2018; Montegrigo, 2019; Rosales et al., 2014).

Lack of resources such as time, finances, and review materials, and quality of study space and testing sites were mentioned as hindrances on the NCLEX-RN preparatory experience. Lack of time and inadequate financial resources were the two most common resource constraints that negatively impacted the participants' NCLEX-RN preparatory experiences. This finding affirms previous research that reported IEN and USEN had limited time to study for the NCLEX (Carr, 2011; Choe & Yang, 2009; Eddy & Epeneter, 2002; Mc Farquhar, 2014; Woo et al., 2009) which can affect NCLEX-RN outcomes (Waterhouse & Beeman, 2003).

Time lag emerged as a relevant finding in this study. Most of the participants who passed NCLEX-RN the first-time had a shorter time lag compared to those who failed the NCLEX-RN the first time. This finding supports previous findings on time lag that reported increased time lag, which causes a decrease in nursing knowledge and skills, reduces the chances of passing the NCLEX-RN (Davis & Nichols, 2002; Woo et al., 2009). In understanding time lag within the IEN context, one important consideration is the absence of a sense of urgency to take the NCLEX-RN because it is not a requirement to practice nursing in nurse's countries of origin (except Canada). For an IEN, the decision to take the NCLEX-RN usually depends on the availability of job offers in the U.S., parental or family influence, or just the desire to possess a U.S. nursing license. Furthermore, the numerous requirements and long NCLEX-RN processing time increase

the time lag for IEN. Therefore, the context of time lag varies for IEN compared to USEN.

Financial status was a major factor that influenced the NCLEX-RN experience of the participants. The cost of requirements and the process of NCLEX-RN application are financially stressful for IEN (Choe & Yang, 2009; McGillis Hall, 2016). Inadequate financial resources can result in anxiety and stress, which can delay the application process. Similar findings were documented in previous studies which stated that inadequate finances and socioeconomic status influence NCLEX-RN outcome (Breckenridge et al., 2013; Carr, 2011). At the time the participants took the NCLEX-RN, the total NCLEX-RN application expenses (U.S. \$1,500 to U.S. \$2,000) was close to the annual salary (U.S. \$2,400) of a regular staff nurse in the Philippines (Department of Labor [DOLE], n.d.). This finding is relevant because it reflects one of the main reasons for IEN to study nursing – it is a means of social mobility. Socio-economic status is one reason for studying nursing, but the cost of meeting eligibility requirements is very expensive for an IEN.

Oducado and Peneula's (2014) study shed light on the typical profile of nursing students in the Philippines where 60 percent of students in a college of nursing came from low-income families. Nationally, about 21.6 percent of Filipinos live below the poverty line (CIA, 2020). Internationally, Dante et al.'s (2016) multi-country European study reported that nursing students worked 18 to 34 hours a week due to economic problems. These data can provide insight into the socio-economic profile of IEN who graduate from nursing and prepare for the NCLEX-RN and give context on the financial

concerns IEN face when applying for the NCLEX-RN. Furthermore, the socioeconomic status of USEN was a reason to delay taking the NCLEX-RN (Breckenridge et al., 2013; Carr, 2011).

The amount and quantity of review materials and the availability, quality, and accessibility of a study space or testing site were also reported to negatively influence NCLEX-RN experiences. This result aligns with previous research that reported the role of the environment on NCLEX-RN outcomes (Eddy & Epeneter, 2002; McGillis Hall et al., 2016). A study space or testing site that is not conducive to learning or testing, has environmental distractions, and accessibility issues can hinder NCLEX-RN experiences. Environmental conditions that interfere with the examinee during the test administration can constitute construct-irrelevant variance (Oermann & Gaberson, 2017; Waltz et al., 2017).

Taking the NCLEX-RN internationally was considered as a hindering factor on NCLEX-RN experiences. This part of the NCLEX-RN experience can add more anxiety due to unfamiliarity with the new environment and the increased expenditures and visa requirements needed for international travel. This is another unique finding that is very relevant to IEN. There are limited international NCLEX-RN testing sites and depending on their country of origin and location, IEN may need to travel domestically or internationally to take the NCLEX-RN which may add stress to the entire testing experience. Since this is one of the few and early studies that documented IEN NCLEX-RN experiences, an exploration of other IEN experiences is needed to determine the impact of international testing on a larger scale. This and other future findings have the

potential to inform regulatory agencies to consider increasing the availability and accessibility of international NCLEX-RN testing sites to IEN.

Family responsibilities and work demands were major concerns that negatively impacted the participants' NCLEX-RN preparation. This finding supports several IEN and USEN studies on the negative association of work and family responsibilities with NCLEX-RN outcomes (Choe & Yang, 2009; Silvestri et al., 2013; Spetz & Seago, 2005; Squires, 2017). Dante et al.'s (2016) finding in a European study claimed that almost one-third of nursing students surveyed had family responsibilities that impacted their academic performance, which sheds light on their status as they prepare for the NCLEX-RN. Since the problem of lack of time was primarily related to these responsibilities, reducing or eliminating some of these competing tasks may potentially provide additional time for studying.

Certain features of regulatory practices such as national licensure examinations, the NCLEX-RN application process, and NCLEX-RN eligibility requirements were found to negatively influence IEN preparatory experiences. Most participants complained about the numerous requirements, expensive cost, and long processing time involved with the NCLEX-RN application as a major hindrance to their NCLEX-RN experiences.

Although the participants mostly considered the PNLE helpful in their NCLEX-RN preparation, certain aspects of the PNLE were perceived as barriers to effective NCLEX-RN preparation. The participants' lack of awareness on the difference between the content and format of the PNLE and NCLEX-RN, the variation in the level of difficulty and type of questions between these two licensure examinations, issues on the

PNLE content or test questions, lack of critical thinking on the PNLE questions, and the examinees' emotional trauma caused by the 2006 PNLE leakage controversy were PNLE-related hindrances on the participants' NCLEX-RN experience.

Unfamiliarity with the NCLEX-RN test plan can put examinees at a disadvantage if they are unaware of the test content distribution, type of test questions, mode of test administration, and test scoring. A similar finding was reported in several studies about IEN unfamiliarity with the test plan and mode of testing as a hindrance in taking the NCLEX-RN (Aiken, 2007; Mathew et al., 2015; McGillis Hall et al., 2016; Petrovic et al., 2019; Pike et al., 2019; Salfi & Carbol, 2017). Differences in testing practices in nursing schools and licensure examinations internationally can explain the unfamiliarity on the types of questions in the NCLEX-RN. This result was conveyed in several studies about differences in teaching and testing in nursing internationally (Bahari, 2015; Benton, 2017; Pike et al., 2019; Xiao et al., 2014). Moreover, the lack of licensure examinations in other countries such as Brazil (daSilva & Cabral, 2018) and the differences in licensure examination internationally (Amankwaa et al., 2015; Hou et al., 2019; Ko & Yu, 2019; Li et al., 2015; Petrovic et al., 2019; Rosales et al., 2014; Salfi & Carbol, 2017; W. Dator, personal communication, March 12, 2017; Xiao et al., 2014) may contribute to the unfamiliarity with the NCLEX-RN.

The lack of critical thinking on the PNLE was reported as a deterrent to effective NCLEX-RN preparation. Some participants described these questions as *straightforward*, *bookish*, and *out-of-this-world*. Compared to the U.S. where the NCLEX-RN is based on the results of a three-year practice analysis and test item development that is done by

practicing staff nurses and nurse educators in the U.S. (NCSBN, 2019), the PNLE questions are based on the expertise and experience of the members of the board of nursing. As a result, knowing the clinical background of the members of the board provides a clue on who writes the questions on the PNLE. Although the PNLE has a test blueprint, the practice of relying on the expertise of the board members may result in PNLE questions that are unclear and highly subjective. Based on the researcher's experiences as a nurse educator and PNLE reviewer, issues have surfaced in the past about the obscurity and trivial nature of some PNLE questions.

A unique experience of five participants was the impact of the 2006 PNLE controversy about the breach in exam integrity, which they described as negatively influencing their NCLEX-RN preparation. This included stress, emotional trauma, and feelings of uncertainty about applying for CGFNS credentials evaluation, taking the NCLEX-RN, and scouting for local and international job prospects. On a larger scale, the absence of a national nursing licensure examination can be a reason for the unfamiliarity of IEN on the entire licensure examination experience (daSilva & Cabral, 2018). For countries that have licensure examinations, such as Canada, China, Ghana, South Korea, and India (Amankwaa et al., 2015; Choe & Yang, 2009; Hou et al., 2019; Ko & Yu, 2019; McGillis Hall et al., 2016; Nair & Rajan, 2017; Shaffer & To Dutka, 2012; Xiao et al., 2014), differences in content and format (Hou et al., 2019; McGillis Hall et al., 2016) may impact NCLEX-RN outcomes. Like the PNLE, the nursing licensure exam in China reportedly had insufficiency in test content that is relevant to nursing practice (Hou et al., 2019). This finding produced another unique perspective on a major difference between

IEN and USEN when taking the NCLEX-RN. IEN are usually professionally licensed in one or more countries before applying for the NCLEX-RN. To date, there are no published studies on the association between national licensure examinations and the NCLEX-RN. This result provides a groundwork for future research on the relationship between international nursing licensure examinations and the NCLEX-RN experience.

The NCLEX-RN application process for an IEN candidate is tedious, rigorous, expensive, and time-consuming, which the participants considered stressful and a major challenge. The NCLEX-RN application process is described as restrictive and stringent compared to licensure in other countries (Aiken, 2007; Aiken et al., 2004). The NCLEX-RN application process is rigorous because it safeguards public safety and guarantees that IEN candidates meet the same requirements and standards expected of USEN (CGFNS, 2019; Shen et al., 2019; Squires et al., 2016). This finding validates previous studies that IEN generally regarded these additional requirements as a major barrier to the NCLEX-RN application process (Covell et al., 2017; McGillis Hall et al., 2015; Moyce et al., 2016; Schipiour, 2016; Squires, 2017; Squires et al., 2016).

Among the different requirements that IEN must meet, the English proficiency examination (i.e. IELTS or TOEFL) was regarded as challenging. This proficiency exam is a disadvantage to IEN because English is not their first language. For some participants, this was a hindrance that was more difficult than the NCLEX-RN itself, a finding in this study that substantiates Squires et al.'s (2016) claim. Successfully passing all components of the English proficiency exam is required before NCLEX-RN eligibility is granted to a candidate (NCSBN, 2019). The speaking portion is regarded as the most

difficult aspect of the English exam due to differences in enunciations and accents. This finding supports the claim of earlier studies about the difficulty of IEN in passing English proficiency exams (McGillis Hall et al., 2015; Squires et al., 2016). Integrative reviews of 98 studies claimed that language is a major barrier for IEN (Moyce et al., 2016; Primeau et al., 2014). Generally, standardized exams, such as the IELTS, TOEFL, CGFNS CEx, and NCLEX-RN, were found to have an inherent bias against non-native English speakers (Bosher & Bowles, 2008).

An interesting and significant finding about regulatory requirements that emerged in this study was the greater difficulty that IEN face when applying for NCLEX-RN in Canada. The major problem is the comparability of their Philippine nursing education with Canadian nursing education. This finding confirms previous research about IEN concerns on the comparability of international nursing education with Canadian nursing education (Mc Gillis Hall et al., 2015). Most IEN do not qualify for NCLEX-RN in Canada unless they undergo bridging programs to address gaps in nursing education and practice (Covell et al., 2017). An IEN nursing education is usually evaluated as equivalent to a lower educational level.

The findings of this study regarding the roles of the national licensure examinations and NCLEX-RN application requirements and processes illustrates the complexities and difficulties IEN face when applying for the NCLEX-RN. While the NCLEX-RN exam is in itself a major challenge, the processes involved in applying for the exam is another hurdle for IEN. In the light of a cyclical global nursing shortage and the recent COVID-19 pandemic, this finding has potential implications for nursing

regulatory bodies in the U.S. and Canada in terms of policy formulation for IEN requirements. Easing some of the regulatory requirements or processes may be a means to reduce the burden on IEN and increase the pipeline for IEN to work internationally without compromising patient safety.

Economic and political factors affecting immigration and bureaucratic processes were cited as hindrances in the overall NCLEX-RN experiences. Various economic factors served as significant hindrances to the overall NCLEX-RN experiences of the participants. The lack of nursing jobs, oversupply of nurses, and low salary of staff nurses in the Philippines were the primary reasons for PEN to leave the Philippines and work internationally (Castro-Palaganas et al., 2017). Low salaries were a major challenge that the participants encountered in completing the NCLEX-RN requirements and application. Furthermore, the lack of nursing jobs in the Philippines and the U.S. economic recession was also identified as economic barriers that negatively influenced NCLEX-RN experiences. PEN spend between U.S. \$1,500–\$2,000 to process all requirements needed for the NCLEX-RN. With a gross monthly salary of U.S. \$200–\$300 a month as a staff nurse in the Philippines (DOLE, n.d.), this amount is exorbitant for an average PEN.

Compounding economics as a deterrent to the participants' NCLEX-RN experience is the imbalance between nursing supply and demand in the Philippines (Castro-Palaganas et al., 2017). On the supply side is the overproduction of nurses by nursing schools. On the demand side, there is a lack of nursing jobs in the country's government and private hospitals that are largely related to budgetary constraints (Cabral, 2016; Castro-Palaganas et al., 2017). The Philippine Department of Health budget has

historically been below the WHO recommendations for health infrastructure (Castro-Palaganas et al., 2017); thus, the hiring of nursing personnel is not a priority. With a lack of job opportunities for nurses, this can be a hindrance in financing and in gaining clinical experience for the NCLEX-RN application process.

Furthermore, the U.S. economic recession in 2008 created a decade-long visa retrogression for IEN because Americans shifted careers to healthcare such as nursing (Shaffer et al., 2018; Snavely, 2016; Staiger et al., 2016). Without job opportunities for IEN in the U.S., PEN lacked the motivation to apply for the NCLEX-RN. For those who passed the NCLEX-RN in the middle of the U.S. economic recession, the lack of U.S. job offers made those U.S. nursing licenses worthless because most boards of nursing offered license validity to IEN for only two years. This economic factor created a significant immigration issue that further creates multiple layers of obstacles in the IEN preparation for the NCLEX-RN.

Some participants mentioned the U.S. immigration requirements and as hindrances on NCLEX-RN experiences. Although these policies facilitated the entry of IEN into the U.S., the immigration policies are generally restrictive to IEN (Aiken et al., 2004). The U.S. visa retrogression for IEN working visa or employment-based immigration that started in the mid-2000s was triggered by the U.S. economic crisis (Jurado & Pacquiao, 2015; Masselink & Jones, 2014; Shaffer et al., 2018), which drastically reduced nursing school enrollment, causing closures of nursing schools and review centers. This U.S. immigration policy issue created a long waiting time for PEN,

which further increased the time lag between graduation and taking the NCLEX-RN and negatively impacted the participants' NCLEX-RN experiences.

The participants reported that part of the difficulty of the NCLEX-RN application process is the inefficiency of the bureaucratic processes in Philippine government offices that issue and authenticate the documents. The Philippine bureaucratic process has been perceived negatively as inefficient and corrupt, which prompted the passage of the Anti-Red Tape Act of 2007 to improve the efficiency of public services by reducing bureaucratic red tape and preventing graft and corruption (Gabriel, 2018). While studies are abundant on international nurse migration, there are no published studies on the influences of economic and immigration factors as well as bureaucratic processes on IEN NCLEX-RN preparatory experiences. This finding provides insight into the intricacies of the NCLEX-RN application process for IEN that is indirectly but significantly affected by macro-level factors such as economics, society, culture, politics, and immigration. Understanding the complexities of the NCLEX-RN process has relevant implications on policy formulation at different levels.

Research Question 4: Strategies to Overcome Obstacles

The fourth research question was: What strategies did IEN use to overcome the hindering factors while preparing for the NCLEX-RN? In relation to the hindrances described by the participants, several strategies were mentioned to address these hindering factors. This section presents the discussion of research findings on the strategies that IEN implemented to overcome the hindrances on their NCLEX-RN

experiences. It is subdivided into four parts: resource management, psychological preparation, management of learning, and self-improvement.

The participants implemented various resource management strategies to overcome hindrances to NCLEX-RN experiences that are related to resources such as finances, time, review materials, and study space. Due to the expensive cost of NCLEX-RN application, the participants sought financial support from families and relatives. This strategy supports Covell et al.'s (2017) findings. The presence of family and work-related responsibilities enabled participants to design structured schedules and conducive study spaces to foster effective study habits. These strategies support findings of previous research on the role of adequate time, prioritization, strategic study planning, a regular study schedule, and a conducive study home environment in increasing the probability of passing the NCLEX-RN (Choe & Yang, 2009; Davenport, 2007; Seldomridge & DiBartolo, 2004; Eddy & Epeneter, 2002; Mc Farquhar, 2014; Beeman & Waterhouse, 2003).

The presence of a strong support system provided effective human resource management to deal with some of the hindrances related to the NCLEX-RN preparation. Generally, the presence of a support system is positively associated with NCLEX-RN and other licensure examination outcomes (Anders et al., 2007; Covell et al., 2017) and its absence may adversely impact these outcomes (Choe & Yang, 2009; Li et al., 2015). Encouragement from family members provided motivation and support to Korean IEN during their NCLEX-RN preparation (Choe & Yang, 2009). The collective nature of Filipino culture makes it easy for nurses to seek help. The concept of *bayanihan*, which

traditionally means people helping each other in times of need, is one defining characteristic of Filipinos. It is a distinct Filipino trait that is rooted in rural Philippine life as a system of mutual help and concern among the villagers (Su & Mangada, 2016). This cultural attribute helped the participants in identifying effective and strong support systems in overcoming hindrances related to the NCLEX-RN experience.

The presence of negative psychological factors and negative attitudes were psychosocial factors that the participants mentioned as hindrances to effective learning and preparation for the NCLEX-RN. Different psychological management strategies were implemented to help overcome these psychosocial hindrances to effective NCLEX-RN preparation. These cognitive-behavioral approaches aim to motivate them and take the preparation seriously to ensure a successful NCLEX-RN outcome (Czekanski et al., 2018) and was similar to Korean IEN because the NCLEX-RN journey giving a sense of fulfillment and direction in achieving a greater goal of creating better opportunities (Choe & Yang, 2015).

Creating control, developing self-discipline, following parental discipline, and controlling distractions helped the participants refocus on their task and goal to pass the NCLEX-RN. For some, parental discipline provided a sense of external control to enable them to refocus. The ability to control these distractions were found to be associated with NCLEX-RN outcomes. Studies claimed that those who were able to manage stress and control distractions have a better focus to study (Choe & Yang, 2009) and have higher chances of passing the NCLEX-RN (Eddy & Epeneter, 2002).

The participants were also able to control their test anxieties before the NCLEX-RN through various cognitive-behavioral techniques. The techniques that were aimed at improving the ability to control test anxiety were similarly reported in several studies (Bahari, 2015; Czekanski et al., 2018; shores, 2010) such as familiarization with the NCLEX-RN test format through formal (e.g. review center or nursing school) or informal means (e.g. involving those who have previous NCLEX-RN experiences) (Bahari, 2015) and prayers (Shores, 2010).

The participants' ability to assess their learning needs and contextual situations enabled them to develop more effective ways to cope with the demands of the laborious NCLEX-preparation. Adjusting their learning environment, modifying their learning strategies, and seeking assistance were strategies that were implemented as an effect of participants' self-assessments. The participants' NCLEX-RN journey contributed to their overall learning, a finding that aligns with Choe and Yang's (2009) study.

Strategies to manage hindrances related to ineffective learning and to promote effective learning included developing effective study habits and using appropriate and recommended review resources. Self-assessment and reflection provided valuable insight into the creation and implementation of study habits that helped the participants to effectively learn what was needed to pass the NCLEX-RN. Previous research has shown inconclusive evidence on the best learning strategies for the NCLEX-RN (Hyland, 2012). Individual learning needs and styles were critical in the participants' choice of learning strategies. Recognizing individual learning styles is critical in promoting effective

learning (Davis et al., 2015). This finding is consistent with Lockie et al.'s (2013) study that reported on the association of learning styles on NCLEX-RN outcomes.

The participants used multiple resources to promote NCLEX-RN learning. Identifying common resources used by past examinees, knowing the trends on the NCLEX-RN, learning needs and learning styles, and acknowledging their contextual situation factored in the selection of review resources. The plethora of review materials can sometimes create confusion with regards to their usefulness and effectiveness. Hyland (2012) argued that there is inconclusive evidence on the use of various review materials. Studies on standardized in-curriculum testing such as ATI and HESI are the two most commonly reported assessment tools that showed predictive abilities on the NCLEX-RN (Alameida et al., 2011; Brodersen & Mills, 2014; Brussow & Dunham, 2018; Chen & Bennett, 2016; Emory, 2013, 2018; Kaddoura et al., 2017; McCarthy et al., 2014; Penprase & Harris, 2013; Phelan, n.d.; Shoemaker et al., 2017; Ukpabi, 2008; Yeom; 2013). Enrollment in a review center was a popular strategy among PEN that was documented in a similar IEN study (Choe & Yang, 2009).

Concerns about the computer-based format of the NCLEX-RN was overcome by familiarization with reading on the computer screen or laptop instead of books. The use of commercially prepared NCLEX-RN review materials provided simulations on the use of computer-based testing (CBT). Moreover, their experiences with CBT on international nurse licensure examinations such as the HAAD in the UAE provided additional opportunities to learn this mode of testing. For other countries such as China and the Philippines, the government plans to move national licensure examinations to CBT (Hou

et al., 2019; Professional Regulation Commission, 2020) may eventually help in addressing this issue about CBT's influence on the NCLEX-RN.

As nursing students, little or nothing can be done to resolve programmatic or curricular issues identified in the Philippine nursing curriculum, but individual actions can be done to adapt to these educational challenges. For some, recognizing the deficits in their nursing programs enabled them to engage in self-study to fill in these deficits. Issues and deficits in student clinical experiences were addressed by studying concepts and procedures on the identified deficient areas.

The participants utilized their clinical environment as a strategy to learn about patient diagnoses and treatments by correlating them with NCLEX-RN topics that they wanted to study. This strategy was found helpful among Korean IEN by applying more knowledge-based nursing care and critical thinking in their clinical setting (Choe & Yang, 2009). Likewise, differences in nursing practice were addressed by studying protocols and standards of Joint Commission International (JCI)-accredited facilities and by referring to nursing textbooks and journals.

Furthermore, nursing schools provide an invaluable resource in helping their graduates prepare for the NCLEX-RN if they have structures and mechanisms to identify and institutionalize programmatic interventions that address this need. Faculty members' awareness of courses that are predictive of NCLEX-RN success is critical in identifying at-risk students for remediation (Abele et al., 2013; Alameida et al., 2011). Some participants shared the deliberate approaches of their nursing programs to include in lectures critical concepts that were not only relevant for the PNLE but also the NCLEX-

RN. As most nursing schools' programs were designed to meet Western healthcare needs, NCLEX-RN content has driven much of their lectures. This approach is also relevant in designing programs that are needed to improve the English proficiency of nursing students. From an international perspective, NCLEX-RN studies on IEN reported that redesigning the nursing curriculum to familiarize nursing students earlier with the NCLEX-RN and incorporating faculty and student development activities to improve English competency are programmatic or institutional strategies that may improve NCLEX-RN outcomes (Bahari, 2015; Choe & Yang, 2009).

The participants resorted to developing interventions to promote healthy physical, psychological, and spiritual health to address self-identified deficiencies to promote a pleasant NCLEX-RN experience. Daily and regular devotional prayers emerged as one of the common strategies that the participants used in almost every aspect of the NCLEX-RN preparation. Prayers were used to guide the participants in making critical decisions about their NCLEX-RN journey, to reduce their anxieties to have more focus in studying, to increase their self-confidence, and to search for spiritual guidance during the exam. Research showed that praying can increase self-confidence and reduce stress (Shores, 2010). This strategy reflects a common and strong cultural characteristic of the participants. The Filipinos are religious as a culture with more than 80 percent of the population being Catholic (CIA, 2020). Their deep sense of Catholicism is deeply rooted in their Spanish colonization for more than three centuries.

Recognizing their limitations on the use of the English language, the participants implemented strategies to overcome this obstacle. These practices were found similar to

Saudi nursing students who wanted to improve their English competency skills (Bahari, 2015). The participants also realized the significance of practicing a healthy lifestyle while preparing for the NCLEX-RN. As part of healthy lifestyle interventions, relaxation techniques were used in promoting physical, psychosocial, and emotional health during NCLEX-RN preparation, a strategy reported in Choe and Yang's (2009) study.

The various strategies that the participants used to overcome the hindrances when they prepared for the NCLEX-RN can serve as a resource for other IEN who might be experiencing a similar situation. With the lack of studies on IEN NCLEX-RN experiences, these findings offer interventions that were found effective from an IEN perspective. These resources, learning, environmental, and personal management strategies provide preliminary data to the very limited IEN NCLEX-RN literature, which can be helpful to other IEN.

Conclusions

Conclusions Based on the Results

This study aimed to explore the experiences of IEN while preparing for the NCLEX-RN. It identified different facilitating and hindering factors that influenced these experiences. Strategies to overcome those hindrances were also investigated. The results of this study provided qualitative evidence that certain individual, cultural, academic, environmental, and global factors influence IEN NCLEX-RN preparatory experiences.

There is a lack of published studies on IEN in general and their performance in the NCLEX-RN in particular. Historically and up to the present, IEN serve as an important pipeline of the U.S. nursing workforce. However, the NCLEX-RN has been a

hindrance to their entry to the U.S. This study was conducted to provide an understanding of why more than half of IEN fail the NCLEX-RN the first time.

The IEN NCLEX-RN experience is unique because of their contextual differences compared to the NCLEX-RN of USEN. Multiple factors can positively and negatively impact the IEN NCLEX-RN experiences. Based on the interpretation and analysis of the findings, limitations, and recommendations in this study, several conclusions were made.

The IEN NCLEX-RN experience is generally considered as stressful, expensive, but rewarding. The NCLEX-RN experience has significant meaning to IEN, a meaning that reflects the interplay of individual, familial, and cultural factors. The financial implications involved in meeting the different requirements, the lengthy processing time and the lack of time due to familial and occupational responsibilities were major hindrances on IEN NCLEX-RN experiences.

Individual and cultural characteristics of IEN influence the quality of their NCLEX-RN experiences. Proficiency in the English language was not largely perceived as a hindrance to their NCLEX-RN experiences. The differences and quality of healthcare work experience, rather than the length of their clinical experience as professional nurses, have a significant impact on IEN NCLEX-RN preparation.

Gaps in IEN nursing education and nursing licensure examination accounted for difficulties in preparing for the NCLEX-RN. IEN are familiar with commonly used NCLEX-RN review resources and strategies. However, IEN are unfamiliar with certain aspects of the NCLEX-RN such as the test plan, scoring, and some critical concepts on delegation practices and prioritization of client needs. Macrolevel factors such as

economics, immigration, and sociocultural factors, play a role in the NCLEX-RN experiences of IEN.

The results of this study provided qualitative evidence of facilitating and hindering factors that affect IEN NCLEX-RN experiences. However, there is a lack of a conceptual framework that can adequately explain the uniqueness, complexity, and multidimensionality of factors affecting IEN NCLEX-RN experiences. This research identified the multidimensionality of the IEN NCLEX-RN experience. Various factors exist that influence IEN NCLEX-RN experiences and outcomes. The research findings provide preliminary data into understanding the NCLEX-RN from an IEN perspective. The findings, conclusions, and recommendations of this study provided direction for future research on IEN and the NCLEX-RN.

Comparison of the Findings with the Theoretical Framework and Previous Literature

This study used Jeffrey's NURS model as a framework to explain the multidimensionality of factors that can influence an IEN NCLEX-RN experience. It was used as a framework to describe the existing literature about IEN and the NCLEX-RN. It was also used as the framework in organizing the interview questions asked of the participants. Its use may have limited capturing phenomena going beyond the concepts of the model.

During the initial stage of data analysis, the deductive process of determining the appropriateness of the NURS model on the study findings seemed plausible. However, further data analysis revealed the emergency of themes that do not appropriately fit the

NURS model. Although the concepts of the model can explain the majority of the findings in this study, the NURS concepts were found to be limiting and restrictive to the richness and thickness of data that emerged during data analysis. An approach was used to rename the concepts using qualitative labels and descriptions in an attempt to appropriately fit the qualitative methodology of the study and the contextual background of the participants. The contextual equivalence of the NURS model concepts and the newly renamed concepts were considered in renaming the concepts. These new concepts were primarily used to describe research questions two and three in this study.

An inductive approach was then used to allow the emergence of themes that do not appropriately fit or are not related to the NURS model. This inductive approach facilitated the development of six other themes that described the answers for research questions one and four. Overall, the inductive approach in developing the themes allowed a very low level of theoretical sensitivity to the NURS model, thus ensuring open-mindedness and describing the data as described by the participants. The results of this study and the adaptation of the NURS model will provide the early conceptualization phase of developing an IEN-focused conceptual framework that will explain the NCLEX-RN experience from an IEN perspective.

The findings that were generated in this study described IEN NCLEX-RN experiences and explored the various facilitating and hindering factors that influenced the NCLEX-RN experiences of IEN. It identified strategies that were implemented to overcome the hindrances of these NCLEX-RN experiences. The lack of published studies in this area was a major rationale for conducting this research. As such, there is a dearth

of literature on this area from which to compare the findings in this study. The research findings on this understudied area provided a beginning understanding of IEN NCLEX-RN experiences that may be used by IEN and other stakeholders worldwide. These findings offered insights on the multidimensionality of the unique contextual characteristics of IEN as they prepare for the NCLEX-RN. Generally, the findings in this study support the majority of findings in previous NCLEX-RN studies on IEN. The study results were also compared to the literature on USEN NCLEX-RN studies, which was more common in quantity and scope.

Interpretation of the Findings

The findings in the study were interpreted based on my personal and professional interpretation of the participants' responses, the theoretical framework used in this study, and the availability of literature about IEN and the NCLEX-RN. However, due to the qualitative nature of the study, it is possible that other factors such as researcher or participant biases that are beyond the control of the researcher, may potentially influence the results of the study. Positionality, bracketing, and reflexivity are therefore crucial in ensuring trustworthiness of the research findings.

One potential source of sampling bias and social desirability that may potentially influence the interpretation of research findings was observed when two of the participants revealed during the interview that they were members of an online NCLEX-RN review group that is managed by the researcher. Recognizing the presence of a potential source of bias is crucial in maintaining credibility of research findings. It is possible that the researcher's position as a Philippine nurse licensure examination and

NCLEX-RN reviewer for those two participants may have influenced the participants' responses. In order to maintain objectivity in analyzing the data, the researcher had to consider his positionality on the phenomenon of interest, became aware of individual characteristics that may become sources of bias, and used reflexivity during the transcription and data analysis.

My experiences as a nurse educator and an IEN provided an emic perspective into the multifactorial nature of the NCLEX-RN. My experiential context as an IEN from the Philippines and as a researcher provided a balance between the emic interpretation and analysis of the findings and the need to maintain objectivity and trustworthiness of the research findings. Similar, discrepant, unique, and unexpected findings were reported and analyzed. Reasons for the differences in this study's findings and those of previous studies were analyzed and explained. Based on these analyses, the differences in the results of this study and the available literature were mainly related to the differences in contextual characteristics between IEN and USEN as well as between IEN across different countries. The participants in this study have different contextual characteristics, academic preparation including graduate nursing degrees, and unique HWE before taking the NCLEX-RN, which can account for the differences in the findings between this study and earlier NCLEX-RN studies for both IEN and USEN. The qualitative methodology of this study provided an opportunity to explore this understudied phenomenon that has potential significance to other IEN globally in particular, and to nursing education, practice, and research, in general.

Limitations

This study has several limitations that should be considered when interpreting the findings. First, the qualitative method used in the study limits the generalizability of the research findings. Although qualitative research is the appropriate methodology to explore an understudied phenomenon, the nature of this research method is a limitation in itself. Second, the study was conducted in the middle of the COVID-19 pandemic; thus, data collection was collected through virtual interviews. The initial plan involved collecting data personally or virtually, but the restrictions brought about by the pandemic were beyond the control of the researcher. The virtual approach reached a wider range of participants, however the absence of face-to-face interaction may have limited participant observation that could have provided cues to the participants' reactions during the interview that may have relevance to the interpretation. Third, the study limited its scope to IEN from the Philippines. Therefore, it provided context that is exclusively within the context of PEN. While the majority of IEN that historically applied for the NCLEX-RN was IEN from the Philippines, the findings have limited transferability to other IEN. Lastly, the sample size was another limitation on this study. The sample size does not reflect the population of IEN who passed and failed the NCLEX-RN. Seventy-five percent of the participants passed the NCLEX-RN the first time compared to 42% of the PEN population who passed the NCLEX-RN the first time. Although the sampling is a limitation, the sample provided useful information about success strategies used by those participants.

Implications of the Study

The results of this study have significant implications not only to individual IEN but to nursing education, practice, and research.

Nursing Education

The NCLEX-RN provides a glimpse of the comparability of the standards of nursing programs worldwide. The NCLEX-RN performance of IEN can serve as an input to international nursing programs, especially to those countries that are identified as top producers of IEN in the U.S, notably the Philippines, and other countries such as India, South Korea, Nigeria, and Puerto Rico.

The results of this study identified various academic factors that influence NCLEX-RN experiences and outcomes. The findings in this study that relate to these academic factors such as nursing courses, topics, clinical practices, and academic performance can provide information on academic factors that may facilitate or hinder an IEN NCLEX-RN experience. Furthermore, the unique context of some IEN with advanced nursing degrees sheds light not only on international undergraduate nursing education but graduate nursing education as well.

Although nursing programs vary globally and there are no global nursing education standards (Baumann & Blythe, 2008; ICN, 2012; Xu, 2010), the NCLEX-RN provides a reliable measurement tool (Foreman, 2018) to assess the quality of nursing programs (Banks et al., 2018; Duncan & Schulz, 2015; Giddens, 2009; Taylor et al., 2014) and the nursing knowledge of IEN using a common examination. Hence, the NCLEX-RN illustrates comparability in nursing education internationally (Aiken, 2007).

The findings of this study identified crucial aspects of the Philippine nursing curriculum and the PNLE that may provide information useful to Philippine nursing education, in particular, and international nursing education, in general. The significance of highlighting these aspects of Philippine nursing education relates to the predominance of PEN in the global labor market, in the U.S. IEN workforce, and international applications for the NCLEX-RN. Philippine nursing education is recognized worldwide and comparable to U.S. nursing education. It has been used as a benchmark by other international nursing schools and has recently become a popular destination of foreign nursing students due to its quality of nursing education.

The identified strengths of the Philippine nursing educational system in this study can be used as input to Philippine nursing schools to either maintain current educational practices or design interventions to enhance the nursing curriculum. With the lack of available literature on international nursing education's influences on IEN NCLEX-RN outcomes, the results of this study can serve as preliminary information in exploring this phenomenon.

Nursing Practice

IEN comprise 6% of the U.S. nursing workforce and more than half of these are IEN from the Philippines. IEN have provided a significant contribution in improving the U.S. nursing workforce (Shaffer et al., 2018; Xu et al., 2010), helping with the U.S. nursing shortage, and their crucial role in the U.S. healthcare system is currently recognized in the light of the COVID-19 pandemic where legislation is underway to allow 25,000 IEN to assist the U.S. during the COVID-19 emergency (CGFNS, 2020).

Though the legislation is in place to expedite the entry of IEN, the NCLEX-RN can be a hindrance to IEN.

As a major source of a pipeline for the U.S. nursing workforce, it is imperative to understand the factors that facilitate and hinder their entry to the U.S., such as the NCLEX-RN. The results of this study can serve to provide input to understand the factors that are barriers in passing the NCLEX-RN. Through this study, the results can be used to increase the chances of passing the NCLEX-RN by identifying barriers and strategies to overcome those barriers of successful NCLEX-RN passing. Since IEN are usually baccalaureate-prepared nurses (Carnevale et al., 2018; Jurado & Saria, 2018; Spetz et al., 2014), increasing the number of IEN in the nursing workforce may help improve patient outcomes (Ma, Ghazal, Chou, Ea, & Squires, 2020) since higher educational attainment is associated with positive patient outcomes (You et al., 2013).

On a larger scale, facilitating the entry of IEN to the U.S. nursing workforce through passing the NCLEX-RN helps in diversifying the healthcare workforce. Achieving a diverse healthcare workforce is one of the major recommendations of the Institute of Medicine (2010) and the Sullivan Commission (2004) to help reduce the problems on health disparities and health inequities in the U.S.

Nursing Research

The significant majority of NCLEX-RN studies were conducted on USEN. The few IEN NCLEX-RN studies mainly focused on Canadian nurses, followed by studies of IEN from Mexico, South Korea, China, India. To date, only one research study has been published that focused on the NCLEX-RN performance of IEN from the Philippines

(Montegrigo, 2020). The importance of IEN in the U.S. nursing workforce is recognized but there has been little research on this area, thus the need for studies on country-specific trends among IEN (Spetz et al., 2014).

The findings in this study can provide preliminary information towards the development of a conceptual base to understand the factors affecting the NCLEX-RN experiences and outcomes of IEN. Several findings on this research can potentially open areas for further research particularly on the influence of academic and occupational factors associated with IEN NCLEX-RN performance. Specifically, the lack of research on IEN critical thinking, nursing courses, national nursing licensure examinations, HWE, and other unique IEN contextual factors are possible research areas.

Recommendations for Individual IEN and Nursing Programs

Based on the results of this study, the following are individual and programmatic recommendations as attempts to promote a positive NCLEX-RN experience and to increase the likelihood of IEN in passing the NCLEX-RN.

Individual Recommendations

IEN preparing for the NCLEX-RN should develop strategies toward managing resources and learning as well as preparing physically and psychologically. Resource management strategies should focus on effective time management, financial preparation, seeking support, and identifying conducive study space. Since most IEN work as staff nurses and may have family responsibilities while preparing for the NCLEX-RN, prioritization and adequate planning to achieve work-study-life balance are needed. Identifying pockets of time and conducive environment to study, outside of work hours

and free from family responsibilities and household chores, may provide time and space for IEN to focus on studying with less distractions. IEN should develop a structure plan of activities to guide them in their NCLEX-RN review. This structure can be developed through enrolling in a review center, following templates provided in NCLEX-RN review resources, learning from other NCLEX-RN candidates' review activities and strategies, or making their own plan based on their learning needs and styles, availability of time, and resources.

IEN should help their significant others understand the relevance of preparing for the NCLEX-RN in order to get their support while studying. IEN may need support in terms of finances, moral support, guidance, or encouragement. Forming study groups with colleagues who are preparing for the NCLEX-RN can likewise provide a good support system. Considering the cost of NCLEX-RN application and preparation, IEN should be adequately prepared financially before starting NCLEX-RN preparation. With the complexity of processing NCLEX-RN requirements, IEN may seek the help of third-party agencies that specialize in providing assistance for NCLEX-RN application. These agencies may provide installment options, which may ease the financial burden to the IEN.

To effectively manage NCLEX-RN preparation, IEN should conduct a thorough self-assessment of their learning needs and styles, as well as areas of strengths and weaknesses prior to or at the start of their preparation. Self-assessment can be done independently by taking a diagnostic exam through an NCLEX-RN review book or a formal NCLEX-RN review class. This can be also be determined by analyzing and

reflecting on their past experiences as nursing students and their performance on the national nursing licensure examination. If working as a staff nurse, IEN can identify disease processes, treatments, procedures, or medications that are unfamiliar and study them. IEN who need more focus on either content preparation or test-taking strategies may consider enrolling in a formal NCLEX-RN review class in order to have proper structure and guidance. Learning from previous NCLEX-RN candidates' preparatory experiences may also provide insights on other learning strategies that may be helpful. Furthermore, acknowledging limitations in English language proficiency may help IEN develop strategies, such as rewording and translating, that may help provide a more positive NCLEX-RN experience and outcome. Since IEN were trained in educational and clinical settings that are different from the U.S, which is the basis for the NCLEX-RN exam, familiarization with the U.S. healthcare system, the NCLEX-RN test plan, and use of computer testing may be advantageous to IEN.

Selection of appropriate NCLEX-RN resources is critical in helping IEN have a positive NCLEX-RN experience. IEN who study independently may choose print or online NCLEX-RN resources that fit their learning needs, time, and budget. Most NCLEX-RN review books provide content review and practice questions while a few resources focus mainly on practice questions. Those who need formal guidance may enroll in either face-to-face or virtual NCLEX-RN review classes. With the variety of NCLEX-RN review centers and online programs, IEN should assess the quality of NCLEX-RN review programs before enrolling in these programs.

Psychological and physical preparations are crucial in preparing for the NCLEX-RN. IEN should understand the time, financial, and resources that an NCLEX-RN preparation requires. Since the result of this study showed that high cost and complexity of NCLEX-RN application and limited time to study are major hindrances to a positive preparatory experience, IEN should develop effective resource management in order to reduce the psychological stress brought about by inadequate resources. Self-care strategies, such as ensuring adequate nutrition, rest and sleep, exercise, and relaxation, should be incorporated in the plan of activities during NCLEX-RN preparation. In addition, seeking spiritual guidance may improve self-confidence and reduce anxiety during the entire NCLEX-RN preparatory experience.

Programmatic Recommendations

International schools of nursing (SON), particularly those countries that are top sources of international applications in the NCLEX-RN, such as the Philippines, India, and South Korea which collectively account for almost 75% of all international applications, and NCLEX-RN review providers should develop IEN-focused and evidence-based NCLEX-RN review programs to help prepare their nursing graduates or NCLEX-RN candidates pass the exam. Identified as major gap in international nursing education, SON should strengthen nursing students' clinical experiences by ensuring ideal application of concepts and theories. Considering the potential limitations in resources in clinical setting, the SON's skills or simulation laboratory can serve as an excellent alternative for IEN to learn ideal settings and practices.

Since Philippine-educated nurses (PEN) account for almost 60% of international NCLEX-RN applications, Philippine SON should integrate in the nursing curriculum concepts related to the NCLEX-RN. There is a need to strengthen medical-surgical nursing, pharmacology, and incorporate concepts such as delegation, prioritization, and assignment in the curriculum since the participants identified these as significant areas of weaknesses of Philippine IEN. Testing in SON should focus on higher cognitive levels such as application and analysis and integrate alternate response items as strategies to enhance IEN critical thinking. In-curriculum activities, such as seminars on NCLEX-RN familiarization for both nursing faculty and students and NCLEX-RN test construction for faculty members, should be incorporated in the SON student and faculty development plans. Mechanism to assess nursing students' areas of strengths and weakness during their nursing education can help in identifying students who are at-risk of failing in the nursing program and licensure examinations. Additionally, since one of the thrusts of the Philippine Commission on Higher Education is to develop curricula that are globally responsive to the needs of the labor market and majority of Philippine SON train nurses to migrate globally, their nursing curriculum should be cognizant of the global nursing curriculum and international nursing licensure requirements. Therefore, incorporating NCLEX-RN concepts and testing in the nursing curriculum can develop familiarization of PEN on the NCLEX-RN.

Lastly, NCLEX-RN review providers should ensure quality programs. The review curriculum must be patterned after the NCLEX-RN test plan. Review schedules, such as evening or weekend schedules, should be offered to allow flexibility and accommodate

the work and family-related responsibilities of IEN. Diagnostic exams should be a standard component of the review program in order to identify areas of strengths and weaknesses at the beginning of the review program. Formative assessment examinations should be incorporated in the review program to monitor the progress in the review. Moreover, the reviewers or educators should have a foundation of the NCLEX-RN and familiarization of U.S. nursing practice and the U.S. health care system, in general. Reviewers or educators who have actual experiences in U.S. nursing education and practice are ideal in providing NCLEX-RN review classes as they can provide real contextual experiences, which are crucial in promoting understanding of U.S. nursing practice.

Recommendations for Further Research

Given the findings and limitations of this research about IEN NCLEX-RN experiences and the factors influencing these experiences, the following are recommendations for future research.

Recommendations Developed Directly from the Data

Based on the research findings, several recommendations for future research include the following. First, the lack of literature on IEN and the NCLEX-RN is a major impetus to conduct both qualitative and quantitative research on this area. Second, the unique IEN context when preparing for the NCLEX-RN calls for a need to develop an IEN-focused conceptual framework to explain NCLEX-RN studies from an IEN perspective and context. Currently, the NURS model is commonly used to explain factors influencing student success outcomes, such as NCLEX-RN. The limitations of the NURS

model in addressing the findings of this study suggests the need for an IEN-focused NCLEX-RN conceptual framework. Third, the adoption of the NCLEX-RN as the licensure examination for Canadian nurses provided an avenue for IEN in Canada to apply for the exam in Canada. A study reported that IEN who took the NCLEX-RN in Canada had statistically significant higher NCLEX-RN FTPR than IEN from the same country who applied for NCLEX-RN in the U.S. (Montegrigo, 2020). Moreover, the limitations on the comparability of IEN education with Canadian nursing education and the result of Montegrigo's (2020) study warrants further investigation of the IEN Canadian context and the NCLEX-RN. Lastly, while this research was grounded in research findings from studies on the IEN NCLEX-RN literature, there are still significant gaps in this knowledge area that require further exploration and explanation. Filling these knowledge gaps may eventually provide a better understanding of the reasons why more than half of the IEN are unsuccessful on the NCLEX-RN. As these gaps are identified, appropriate interventions can be designed at individual, institutional, or systemic levels to increase the NCLEX-RN pass rates of IEN.

Recommendations Derived from Methodological, Research Design, or Other

Limitations of the Study

Generally, the limited quantity and scope of studies on IEN and the NCLEX-RN is a major reason to conduct future studies in this area. Although the findings in this study provide preliminary evidence on the influences of different factors on IEN NCLEX-RN experiences, the qualitative nature of this study limits the generalization of the study findings. Quantitative studies that investigate the association of various IEN contextual

factors affecting the NCLEX-RN are needed in consideration of the unique contextual differences of IEN. Contributing to the existing limited literature on IEN NCLEX-RN experiences, the findings in this study demonstrated the presence of a multitude of factors that can influence these experiences, which can serve as a conceptual base to guide quantitative studies on this topic.

A similar qualitative study on a different set of IEN that includes multiple authorship may improve the trustworthiness of this study. Although thorough methodological considerations were observed in the conduct of this research, the use of a single investigator in a qualitative study may be a limitation in data interpretation and analysis. Having multiple perspectives on the investigated phenomenon through multiple investigators can enrich the understanding of the phenomenon and enhances the trustworthiness of the study findings.

Recommendations Based on the Limitations

This study primarily focused on the NCLEX-RN experiences of a specific group, the IEN from the Philippines. While the inclusion of this group is relevant because of their predominance as the largest group of IEN applying for the NCLEX-RN, it excluded the experiences of other IEN. An exploration of the NCLEX-RN experiences of other IEN is needed to develop a deeper understanding of this phenomenon on a wider range of IEN. As such, the creation of an international research collaboration may be a strategy to achieve this goal. International nurse educators and researchers who have a similar interest in IEN and the NCLEX are potential sources for international research collaboration. Furthermore, to address the limitation on sampling, sampling methods for

future research should include screening for NCLEX-RN pass or failure in order to enable the researcher to obtain a sample that is consistent with the population of NCLEX-RN takers.

Summary

Using a qualitative descriptive research design, this study explored the NCLEX-RN experiences of IEN. The results of this study identified various individual, academic, and environmental factors that are facilitating and hindering IEN NCLEX-RN experiences. Strategies were identified to overcome the hindering factors of NCLEX-RN experiences. These factors are relevant to the concepts of the NURS model, which is the theoretical framework of this study. While some of these factors are consistent with most previous published NCLEX-RN studies on USEN, the findings in this research provided a perspective that is contextually relevant and unique to IEN. These findings can help explain why more than half of IEN fail the NCLEX-RN.

This is the first study that explored the NCLEX-RN experiences of IEN, as far as the knowledge of the researcher is concerned. The findings in this study are relevant to nursing education, nursing practice and workforce, and nursing research. It provides understanding of various factors that can help individuals and graduated of nursing schools improve the chances of passing the NCLEX-RN. The limitations and recommendations in this study can be used to improve future research on NCLEX-RN and IE

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APPENDIX A

INFORMED CONSENT

I am James Montegrigo, a PhD candidate at the University of North Carolina at Greensboro. I am conducting a research for my dissertation about internationally educated nurses.

The purpose of this study is to explore the experiences of internationally educated nurses (IEN) when they prepared for the NCLEX-RN. It will explore the facilitating and hindering factors that influence the NCLEX-RN outcome on IEN. You are being asked to be in this study because you have graduated with a Bachelor of Science in Nursing degree from the Philippines and you have taken the computer-based NCLEX-RN. If you choose to participate you will be asked questions about your demographic characteristics (age, gender, marital status, etc.) and your NCLEX-RN preparatory experiences. The first interview will last about 45 minutes to 1 hour. A 10 to 15-minute follow-up interview may be necessary to clarify your answers. Your total time commitment if you participate in this study will be 55 minutes to 1 hour and 15 minutes.

The questions I'll ask you are personal experiences when you prepared for your NCLEX-RN. For example, I will ask you about the factors that facilitated or hindered your NCLEX-RN preparation. You may experience embarrassment when answering these questions. I do not expect this risk to be common and you may choose to skip questions you do not want to answer. Breach of confidentiality is possible, but very rare. Your privacy and confidentiality will be a priority throughout and after the study. You will be assigned a codename or pseudonym during the interview. This will be de-identified after the data analysis. Other than my faculty advisor, no one will have an access to your interview responses.

You will be asked to provide your phone number, email address, or Facebook account as part of this study. These will be used to communicate with you if you intend to do virtual interview via phone, Zoom (email address), or Facebook messenger video or voice call, for the initial and follow-up interview, as needed. To protect your privacy (identity), I will assign a study ID code and a pseudonym to your interview responses. After the interview and follow-up, if needed, I will delete the email address, phone number, or Facebook account from the interview responses so the responses will only have the study ID code and pseudonym. While the study is active, all data will be stored in a password-protected data base that can only be accessed by the primary investigator (PI). Only the PI and two Ph.D. faculty advisors will have routine access to the reconstructed interview data. Furthermore, your information will be stored in a firewalled and password-protected personal laptop at UNCG's Box for data security.

Do you have any questions? By participating in the interviews, you are agreeing to become a research participant voluntarily and you are consenting on the use of your responses for the abovementioned research purpose.

APPENDIX B
INTERVIEW GUIDE

PART I – Participant’s Demographic Profile

Age: _____
Gender: _____
Year graduated from BS Nursing: _____
School where BS Nursing was completed: _____
Year when you took the NCLEX-RN exam the first-time: _____
Civil status when you took the NCLEX-RN the first-time: _____
Do you have advanced degree (e.g. MAN, MSN, MAED) when you took the NCLEX-RN the first time? _____
What was the result of your first attempt of taking the NCLEX-RN? _____

Part II – Interview Questions

1. Describe your personal experience when you were preparing for the NCLEX-RN.
2. How did you prepare for the NCLEX-RN?
3. Did you pass or fail the first time you took the NCLEX-RN?
4. Based on your NCLEX-RN result, what areas were below or near the passing standard? Did you retake the exam? How did you prepare for those areas on the test that were below or near passing?
5. What do you think helped you while reviewing for your NCLEX-RN?
6. Do you think race or ethnicity has a role in your NCLEX-RN testing experience?
Why or why not?
7. What obstacles did you encounter while preparing for the exam?
8. If you encountered problems while preparing for the exam, what strategies did you use to solve them?

APPENDIX C

SUMMARY OF THEMES, SUBTHEMES, AND CODES

Table 4. Themes, Subthemes, and Codes of the IEN NCLEX-RN Experiences

Theme 1	My NCLEX-RN* Journey	
Subthemes	<i>A Good Journey</i>	<i>Not an Easy Road</i>
Codes	Easy Good Relaxed	Difficult Overwhelming Stressful Unforgettable
Theme 2	My Meaning of NCLEX-RN	
Subthemes	<i>The American Dream</i>	<i>It's an Investment</i>
Codes	As a stepping stone Privilege	Increases learning Blessing in disguise Greatest achievement

Note: *National Council Licensure Examination – Registered Nurses

Table 5. Theme, Subthemes, and Codes of Being Filipino

Theme 1	Being Filipino		
Subthemes	<i>The Filipino Family</i>	<i>Filipino Traits</i>	<i>The Global Nurse</i>
Codes	Filipino family Breadwinner Relatives Childhood dream Childhood experience	Religious Optimism Nationalism Competitive Caring Persistence Paternalism Traditions Openness Language	Healthcare experience Lack of experience

Table 6. Theme, Subthemes, and Codes of Being Positive

Theme 2	Being Positive		
Subthemes	<i>Mental Preparation</i>	<i>Positive Attitude</i>	<i>Critical Thinking</i>
Codes	Focus Control Self-assessment Taking risk Goal	Motivation Self-confidence Study habits	Critical thinking

Table 7. Theme, Subthemes, and Codes of Learning Effectively, Subtheme 1

Theme 3	Learning Effectively		
Subtheme 1	<i>Learning the Right Way</i>		
Categories	Review Strategies	Time	Avoiding Distraction
Codes	Focus on few resources Practice tests Online Q&A sessions Reading Systems approach Self-review Review center Posters Study test plan Have a concrete plan Notetaking Highlighting Know trends Translating Familiar with U.S. healthcare system Time management Focus on weakness Diagnostic test Performance report	Review time Willingness time Away from family Time management Time lag	No stress No chores No social media No going out

Table 8. Theme, Subthemes, and Codes of Learning Effectively, Subtheme 2

Theme 4	Learning Effectively				
Subtheme 2	<i>Using the Right Resources</i>				
Categories	Review resources	Support System	Finances	Environment	Healthy Lifestyle
Codes	Online resources NCLEX books Textbooks School notes PNLE notes Multimedia	Family Relatives Friends Colleagues Spouse Online	Financial support Financial preparation	Study space Testing site International testing	Food Exercise Sleep

Table 9. Theme, Subthemes, and Codes of Training as a Global Nurse

Theme 4	Training as a Global Nurse		
Subthemes	<i>Philippine Nursing Education</i>	<i>Advance Nursing Degree</i>	<i>Areas of Strength</i>
Codes	Foundational knowledge Faculty Students Clinical experiences Quality of program Quality of nursing school Teaching strategies Language	MAN* MSN**	Medical-surgical nursing Pharmacology Pathophysiology Fundamentals of nursing Psychiatric nursing Pediatric nursing Prioritization Delegation

Note: *Master of Arts in Nursing; **Master of Science in Nursing

Table 10. Theme, Subthemes, and Codes of Regulating Nursing Practice

Theme 5	Regulating Nursing Practice		
Subthemes	<i>Licensure Examinations</i>	<i>NCLEX-RN Application Process</i>	<i>Regulatory Requirements</i>
Codes	PNLE* HAAD**	NCLEX-RN application Cost	CGFNS*** English proficiency exams

Note: *Philippine nurse licensure examination; **Health Authority Abu Dhabi (United Arab Emirates); ***Commission on Graduates of Foreign Nursing Schools

Table 11. Theme, Subthemes, and Codes of Living in a Bigger World

Theme 6	Living in a Bigger World		
Subthemes	<i>Economics</i>	<i>Socio-cultural</i>	<i>Immigration</i>
Codes	Living conditions Job security Family	Discrimination Cultural restrictions	Immigration policy Hiring of IEN in the U.S.

Table 12. Theme, Subthemes, and Codes of Being Filipino

Theme 1	Being Filipino	
Subthemes	<i>Filipino Traits</i>	<i>The Global Nurse</i>
Codes	Mañana habit or procrastination Age as a developmental factor Family-centeredness Language	Healthcare work experiences

Table 13. Theme, Subthemes, and Codes of Being Overwhelmed

Theme 2	Being Overwhelmed	
Subthemes	<i>Psychosocial Factors</i>	<i>Negative Behaviors</i>
Codes	Anxiety Distractions Pressure Stress	Lack of focus Arguing with the test

Table 14. Theme, Subthemes, and Codes of Training as a Global Nurse

Theme 3	Training as a Global Nurse	
Subthemes	<i>Philippine Nursing Education</i>	<i>Areas of Weaknesses</i>
Codes	Gaps in the nursing curriculum Clinical experiences	Pharmacology Medical-surgical nursing Delegation Prioritization Multiple response questions

Table 15. Theme, Subthemes, and Codes of Ineffective Learning

Theme 4	Ineffective Learning		
Subthemes	<i>Learning the Wrong Way</i>	<i>Inadequate Resources</i>	<i>Competing Responsibilities</i>
Codes	Ineffective review strategies Exposure to non-ideal clinical environment Lack of preparation Unfamiliarity with the NCLEX-RN Unfamiliarity with the U.S. healthcare system Poor quality of review center	Lack of time Finances Lack of resources Study space Unfamiliar environment	Family responsibilities Work responsibilities

Table 16. Theme, Subthemes, and Codes of Regulating Nursing Practice

Theme 5	Regulating Nursing Practice		
Subtheme	<i>Licensure Examination</i>	<i>NCLEX-RN Application Process</i>	<i>Regulatory Requirements</i>
Codes	Philippine Nurse Licensure Examination	NCLEX-RN application	CGFNS English proficiency exams

Table 17. Theme, Subthemes, and Codes related to Living in a Bigger World

Theme 6	Living in a Bigger World		
Subthemes	<i>Economics</i>	<i>Immigration</i>	<i>Bureaucracy</i>
Codes	Finances Socioeconomic status Lack of nursing jobs Need for global migration Regional economic crisis	U.S. visa retrogression	Inefficient system

Table 18. Theme, Subthemes, and Codes of Resource Management

Theme 1	Resource Management			
Subthemes	<i>Financial Management</i>	<i>Time Management</i>	<i>Human Resource Management</i>	<i>Environmental Management</i>
Codes	Financial support Saving Installment Working overtime	Concrete planning Balance	Human resources Online resources Agencies	Quality Accessibility

Table 19. Theme, Subthemes, and Codes of Management of Learning

Theme 2	Management of Learning	
Subthemes	<i>Effective Study Habits</i>	<i>Use of Review Resources</i>
Codes	Practice test questions Focus on content Reading intently Translation Familiarize with the unknown Clinical application Seeking clarification Notetaking	Print resources Online resources Licensure exam notes Advance nursing degree notes Review Center

Table 20. Theme, Subthemes, and Codes of Psychological Preparation

Theme 3	Psychological Preparation		
Subtheme	<i>Positive Mindset</i>	<i>Focus and Control</i>	<i>Self-assessment</i>
Codes	Set goals Be inspired Be motivated Be committed	Self-discipline Parental discipline Controlling distractions	Know your limitations Make adjustments Appreciate learning Recognize differences Take risks

Table 21. Theme, Subthemes, and Codes of Self-improvement

Theme 4		Self-improvement	
Subtheme Codes	Devotional Prayers Prayers	English Competency	Healthy Lifestyle
		Improvement Strategies	
		Reading	Breaks
		Translation	Food
		Rewording	Sleep
		Watching movies/TV	Exercise
			Spa/Salon